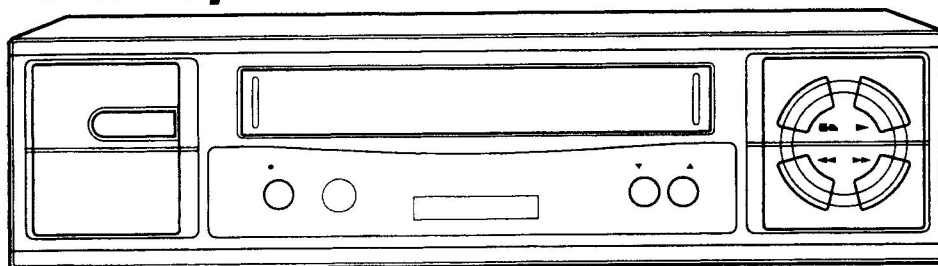




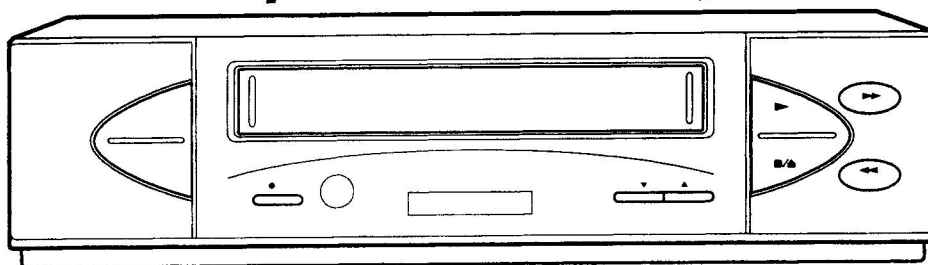
Video Cassette Recorder



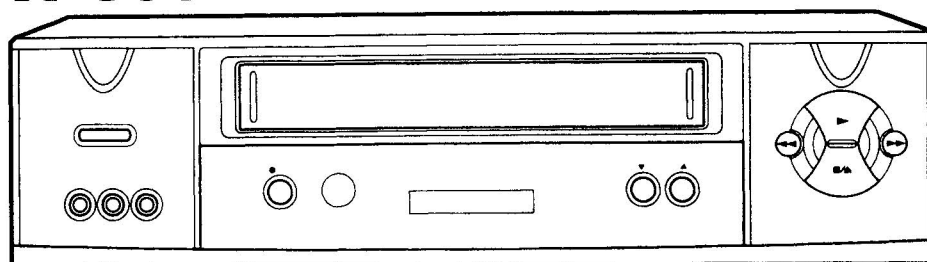
TVR-500, TVR-500 V



TVR-502 S, TVR-502 VS, TVR-504 VS



TVR-506 VS



SERVICE MANUAL

Quick Reference of Specific Parts List

(Latest upgrade list Oct. '97)

The parts No. of Face Plate Ass'y, Video Circuit Board etc. for **TVR-500**, **TVR-500 V** and **TVR-502 S**.

CABINET & CHASSIS

Ref. No.	Part No.	Description
1	59502	DECK MECHANISM NV3200 FOR TVR-500, TVR-500 V
	59503	DECK MECHANISM NV3400 FOR TVR-502 S
5	22329120	FACE PLATE ASS'Y (TVR-500)
	22329130	FACE PLATE ASS'Y (TVR-500 V)
	22328990	FACE PLATE ASS'Y (TVR-502 S)
18	35R61A0	MAIN CIRCUIT BOARD (TVR-500)
(ETA01)	(104307420)	(TUNER,TMLG1X103A)
	35R60C0	KEY CIRCUIT BOARD (TVR-500)
20		└ KEY (L) CIRCUIT BOARD
21		└ KEY (R) CIRCUIT BOARD
18	35R59A0	MAIN CIRCUIT BOARD (TVR-500 V)
(ETA01)	(104307420)	(TUNER,TMLG1X103A)
	35R60C0	KEY CIRCUIT BOARD (TVR-500 V)
20		└ KEY (L) CIRCUIT BOARD
21		└ KEY (R) CIRCUIT BOARD
18	35R41C0	MAIN CIRCUIT BOARD (TVR-502 S)
(ETA01)	(104307420)	(TUNER,TMLG1X103A)
	35R39C0	KEY CIRCUIT BOARD (TVR-502 S)
20		└ KEY (L) CIRCUIT BOARD
21		└ KEY (R) CIRCUIT BOARD
22	35R40C0	REAR SUB CIRCUIT BOARD (TVR-502 S)

For details, refer to pages 28 to 40.

ACCESSORIES

Model Name Description	TVR-500	TVR-500 V	TVR-502 S
REMOTE CONTROLLER	RC-702 108070201		RC-703 108070300
IN-BOX	28528980	28528970	28528830
OWNER'S MANUAL	TVR-500/500 V 288E7050		TVR-502/504 288E6920

Quick Reference of Specific Parts List

(Latest upgrade list Oct. '97)

The parts No. of Face Plate Ass'y, Video Circuit Board etc. for **TVR-502 VS**, **TVR-504 VS** and **TVR-506 VS**.

CABINET & CHASSIS

Ref. No.	Part No.	Description
1	59502 59503 59504	DECK MECHANISM NV3200 FOR TVR-502 VS DECK MECHANISM NV3400 FOR TVR-504 VS DECK MECHANISM NV3600 FOR TVR-506 VS
5	22328980 22328970 22328960	FACE PLATE ASS'Y (TVR-502 VS) FACE PLATE ASS'Y (TVR-504 VS) FACE PLATE ASS'Y (TVR-506 VS)
18 (ETA01)	35R38C0 (104307420) 35R39C0	MAIN CIRCUIT BOARD (TVR-502 VS) (TUNER,TMLG1X103A) KEY CIRCUIT BOARD (TVR-502 VS)
20		└KEY (L) CIRCUIT BOARD
21		└KEY (R) CIRCUIT BOARD
22	35R40C0	REAR SUB CIRCUIT BOARD (TVR-502 VS)
18 (ETA01)	35R49C0 (104307420) 35R39C0	MAIN CIRCUIT BOARD (TVR-504 VS) (TUNER,TMLG1X103A) KEY CIRCUIT BOARD (TVR-504 VS)
20		└KEY (L) CIRCUIT BOARD
21		└KEY (R) CIRCUIT BOARD
22	35R40C0	REAR SUB CIRCUIT BOARD (TVR-504 VS)
18 (ETA01)	35R42C0 (104307320)	MAIN CIRCUIT BOARD (TVR-506 VS) (TUNER,TMLG2X105A)
19	37279B0	└BL ASSY DUAL
	35R43C0	KEY CIRCUIT BOARD (TVR-506 VS)
20		└KEY (L) CIRCUIT BOARD
21		└KEY (R) CIRCUIT BOARD
22	35R44C0	REAR SUB CIRCUIT BOARD (TVR-506 VS)

For details, refer to pages 30,31 and 41 to last page.

ACCESSORIES

Model Name Description	TVR-502 VS	TVR-504 VS	TVR-506 VS
REMOTE CONTROLLER	RC-703 108070300	RC-704 108070400	RC-705 108070500
IN-BOX	28528820	28528810	28528800
OWNER'S MANUAL	TVR-502/504 288E6920		TVR-506 VS 288E6910

About This Manual

OPTIONAL FUNCTION TYPE	SIMPLE	V.P.S	SHOW VIEW	SHOW VIEW V.P.S
2 VIDEO HEAD MONAURAL 1 SCART	○ TVR-500 (2H, 1SC, SIM.)	▲ TVR-500 V (2H, 1SC, VPS)	_____	_____
2 VIDEO HEAD MONAURAL 2 SCART	_____	_____	◇ TVR-502 S (2H, 2SC, SV)	◎ TVR-502 VS (2H, 2SC, FULL)
4 VIDEO HEAD MONAURAL 2 SCART	_____	_____	_____	△ TVR-504 VS (4H, 2SC, FULL)
4 VIDEO HEAD STEREO HI-FI 2 SCART	mark MODEL NAME (SYMBOL)	_____	_____	TVR-506 VS (Hi-Fi)

This Service Manual offers you a quick and convenient reference in a single short book for the six models listed above as well as on the front cover. General information common to all the models is provided in such a convenient manner.

Model-specific information is identified with appropriate indications. In addition, the detail Parts List in the PC board identifies each model with its **mark** or **SYMBOL**.

Before referring to other parts of this Service Manual, check again the above table for models applicable to the services.

CONTENTS

SUMMARY	2
1. REMOVING THE TOP COVER AND FP ASSY	2
2. REMOVING THE MAIN PCB AND THE DECK MECHANISM FROM THE CHASSIS	2
3. REMOVING THE DECK MECHANISM FROM THE MAIN PCB	2
4. RE-ASSEMBLING PROCEDURE	2
ELECTRICAL ADJUSTMENT	3
1. PLAYBACK SWITCHING POINT ADJUSTMENT IN COMMON	3
2. AUDIO DISTORTION AND SEPARATION ADJUSTMENT (DUAL PCB)	4
3. HI-FI AUDIO PLAYBACK CHECK	5
4. AUDIO SELF-RECORD AND PLAYBACK CHECK (NORMAL/Hi-Fi)	6
5. STEREO AND DUAL FUNCTION CHECK	7
TAPE TRANSPORTATION ALIGNMENT PROCESS	8
DETAIL EXPLANATION	9
1. PRESET	9
2. ACE HEAD ROUGH ADJUSTMENT	9
3. LINEARITY & X-DISTANCE ADJUSTMENT	10
4. ACE HEAD RE-CHECK	11
5. TAPE WRINKLE CHECK ETC.	12
PERIODIC MAINTENANCE	13
SERVICING DIAGRAMS AND PARTS LIST	14
1. CASSETTE DECK ASSEMBLY	14
2. BLOCK DIAGRAM	18
3. TERMINOLOGY REFERENCE	19
4. SCHEMATIC DIAGRAM	Separate sheet, 21-24
5. IC, TRANSISTOR LEAD IDENTIFICATION	25
6. CABINET & CHASSIS ASSEMBLY	26
7. PARTS LIST FOR FINAL ASSEMBLY	27
8. PC BOARD ASS'Y (MAIN) PARTS LOCATION (2 Video Head Monaural 1 Scart Model)	28
9. PC BOARD ASS'Y (MAIN) PARTS LIST (2 Video Head Monaural 1 Scart Model)	30
10. PC BOARD ASS'Y (MAIN) PARTS LOCATION (Monaural 2 Scart Model)	39
11. PC BOARD ASS'Y (MAIN) PARTS LIST (Monaural 2 Scart Model)	41
12. PC BOARD ASS'Y (KEY-L, R) PARTS LIST (Monaural Model)	50
13. PC BOARD ASS'Y (KEY-L, R) PARTS LOCATION (Monaural Model)	50
14. PC BOARD ASS'Y (REAR SUB) PARTS LIST (Monaural 2 Scart Model)	51
15. PC BOARD ASS'Y (REAR SUB) PARTS LOCATION (Monaural 2 Scart Model)	52
16. PC BOARD ASS'Y (MAIN) PARTS LOCATION (Hi-Fi Model)	53
17. PC BOARD ASS'Y (MAIN) PARTS LIST (Hi-Fi Model)	55
18. PC BOARD ASS'Y (DUAL) PARTS LIST (Hi-Fi Model)	64
19. PC BOARD ASS'Y (DUAL) PARTS LOCATION (Hi-Fi Model)	64
20. PC BOARD ASS'Y (KEY-L, R) PARTS LIST (Hi-Fi Model)	65
21. PC BOARD ASS'Y (KEY-L, R) PARTS LOCATION (Hi-Fi Model)	65
22. PC BOARD ASS'Y (REAR SUB) PARTS LIST (Hi-Fi Model)	66
23. PC BOARD ASS'Y (REAR SUB) PARTS LOCATION (Hi-Fi Model)	67
TABLE OF IC PIN VOLTAGE	68
SERVICE NOTE	72

SUMMARY

1. REMOVING THE TOP COVER AND FP ASSY (FIGURE 1)

- ① Remove the screws.
- ② Remove the Top Cover.
- ③ Remove the FP Assy, held in position by the eight prongs, the direction of arrow.
- ④ Remove the Bracket.
- ⑤ Remove the Sub PCB, if one is attached, from the Main PCB.

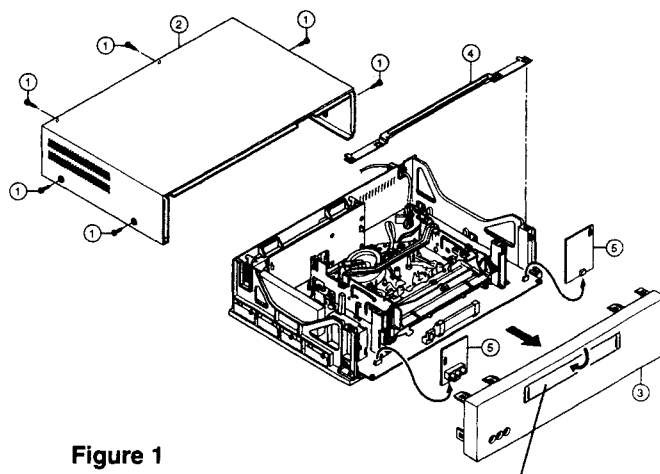


Figure 1

* Attach the Face Plate with the Dust Cover pushed open.

2. REMOVING THE MAIN PCB AND THE DECK MECHANISM FROM THE CHASSIS (FIGURE 2)

- ⑥ Disconnect the Power Cord from the chassis.
 - ⑦ Remove the three screws.
 - ⑧ Remove the MAIN PCB include Deck Mechanism from the three prongs on the chassis.
- * Operations can be performed with the outside of the chassis in this condition as long as the power cord is not removed from the main PCB. Also, turn the foil side of the main PCB upside down during maintenance.

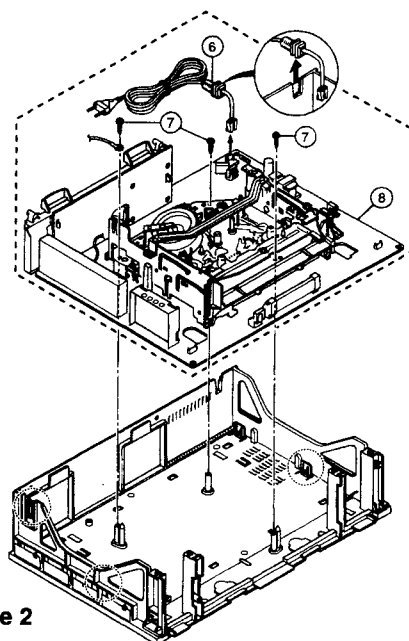


Figure 2

3. REMOVING THE DECK MECHANISM FROM THE MAIN PCB (FIGURE 3)

- ⑨ Disconnect the Flexible Wire from the CTL Head PCB.
- ⑩ Disconnect the QS-Connector from the Motor PCB.
- ⑪ Disconnect the Flexible Wire of Cylinder Head from the Connector-Post on the Main PCB.
- ⑫ During the removal of the deck mechanism from the main PCB, you could use precision forceps to carefully extract the washer covered with cellophane tape preventing it being lost. Although the washer can be reused if such great care is taken, it is recommended that it is replaced with a brand new washer when the unit is re-assembled. It is therefore a good idea to ensure that these washers are always available from the service center stock.

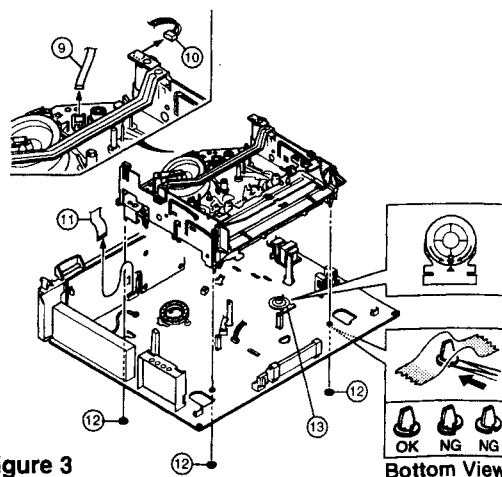


Figure 3

4. RE-ASSEMBLING PROCEDURE

- ⑬ Adjust the position of the “▼” and “▲” mark.
- Follow the reverse sequence to the dismantling procedure to re-assemble the unit.

In this manual, illustration for SUMMARY, Hi-Fi model is

used. Instruct the same way for the Monaural models.

ELECTRICAL ADJUSTMENT

1. PLAYBACK SWITCHING POINT ADJUSTMENT IN COMMON

- Mode** : PLAY
- Test Signal** : TPS-13 or 13S
- Check Point** : FIP
- Adjustment Point** : The adjustment is performed automatically by μ -com.
- Adjustment** :
- (1) Playback the test tape and allow the automatic ATR to finish. The ATR is finished when "DT" (Digital Tracking) on the FIP stops blinking. (Figure 1 an arrow)
 - (2) Short the connection between PG-DELAY (J208) and GND (J226) on the MAIN PCB (Figure 2 below). Then all the segments start blinking (Figure 1). During blinking, μ -com performs the adjustment of the switching point.
 - (3) In about 5 seconds, the FIP indicates the counting up status, which is shown on the usual playback mode. It means that the Adjustment of the switching point is completed.
 - (4) Clear the TEST POINT short.

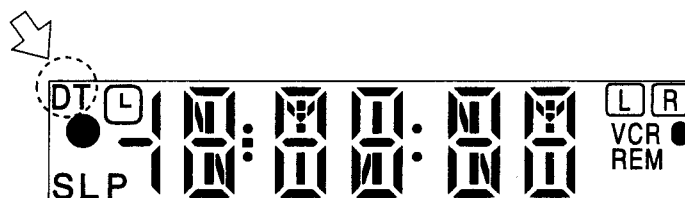


Figure 1

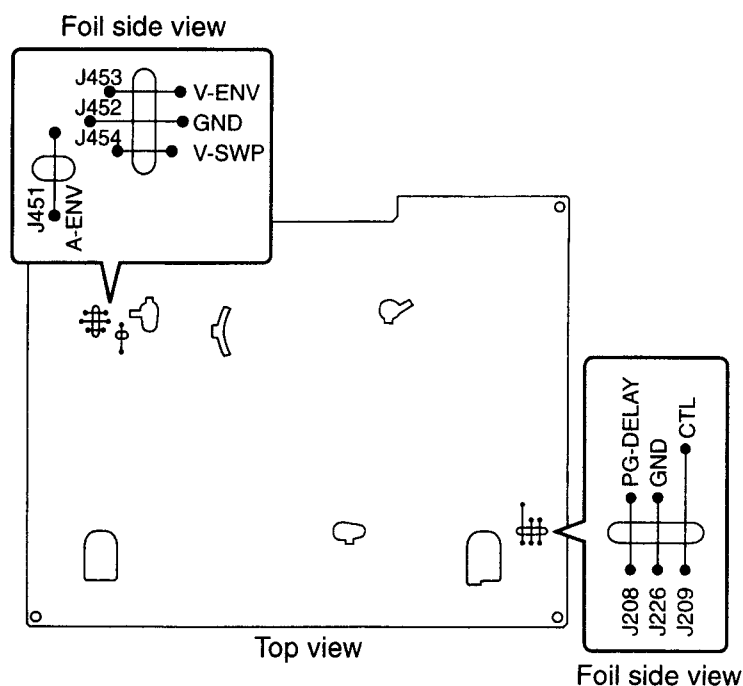
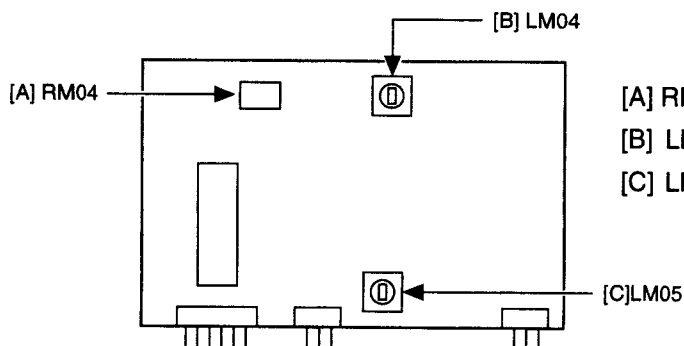


Figure 2

2. AUDIO DISTORTION AND SEPARATION ADJUSTMENT (DUAL PCB)

DUAL PCB BLOCK

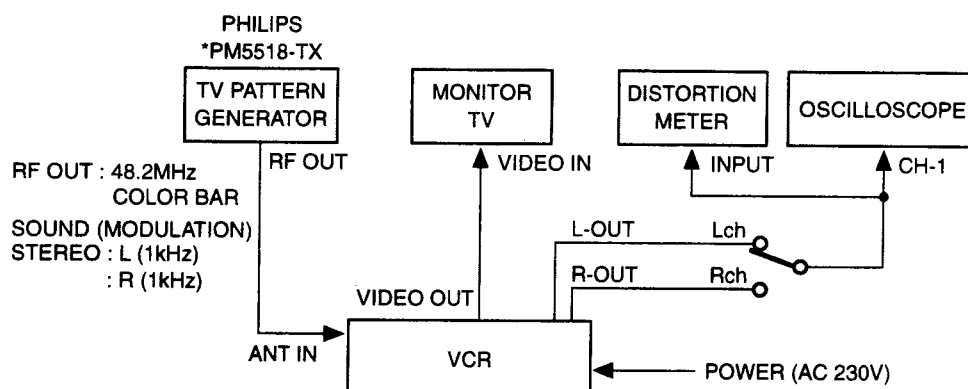


[A] RM04 (SEP-ADJ.) VOLUME SEP-ADJ. SEMI-FIXED VOLUME

[B] LM04 (5.74M/Rch-ADJ.) R-ch-ADJ. SEMI-FIXED COIL

[C] LM05 (5.5M/Lch-ADJ.) Lch-ADJ. SEMI-FIXED COIL

Connections:



Settings:

• PM5518-TX

FREQUENCY : 48.25MHz (2ch)
PATTERN : COLOR BAR (PAL)
MODULATION : STEREO L (1kHz) / R (1kHz)

• DISTORTION METER

RANGE : 10mV

• OSCILLOSCOPE

TIME / DIV : 1ms / COUPLING : AC
VOLTS / DIV : CH-1 = 0.2V
PROBE : 1 : 1

Adjustment:

(1) Rch (Lch) AUDIO DISTORTION ADJUSTMENT

Receive a signal on 2ch (48.25MHz) and adjust the Semi-fixed coil LM04 (LM05) until the AUDIO OUT distortion is at its lowest level.

Make sure that the distortion level is less than 2%.

(2) SEPARATION ADJUSTMENT

Turn SG (PM5518-TX) MODULATION off for Rch only. Then adjust the Semi-fixed VOLUME RM04 for AUDIO OUT to reduce cross-talk to a minimum.

Make sure that the AUDIO OUT level for Lch at its lowest level.

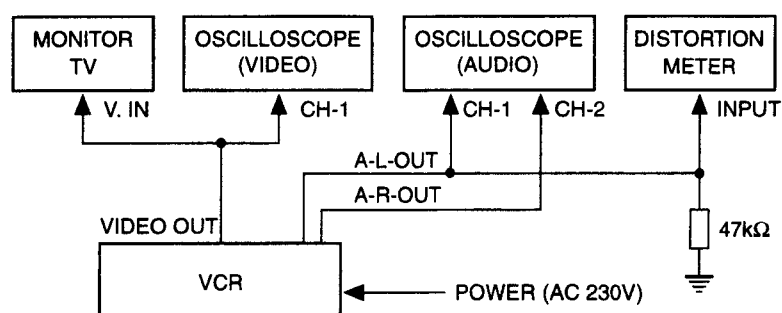
Check that the SEPARATION level is 20dB or higher.

SEPARATION SPEC = 20dB or higher

* This service manual gives examples using the PM5518-TX that is available at the production factory. At service centers, use a TV Pattern Generator, such as, PM5518-TX (PHILIPS) or better, to perform the adjustment shown above.

3. Hi-Fi AUDIO PLAYBACK CHECK

Connections:



Settings:

- **OSCILLOSCOPE (VIDEO)**
 - TIME / DIV : 10 μ s / COUPLING : TV-H
 - VOLTS / DIV : 0.2V / PROBE : 1:1
- **OSCILLOSCOPE (AUDIO)**
 - TIME / DIV : 0.5ms / COUPLING : AC
 - VOLTS / DIV : CH-1=0.2V / CH-2=0.2V
 - PROBE : 1 : 1
- **DISTORTION METER**
 - LEVEL RANGE : 1V / DISTORTION : 10%

Mode : PLAY

Test Signal : PAL HiFi TEST TAPE
VIDEO (COLOR BAR) / AUDIO (Lch=1kHz / Rch=400Hz)

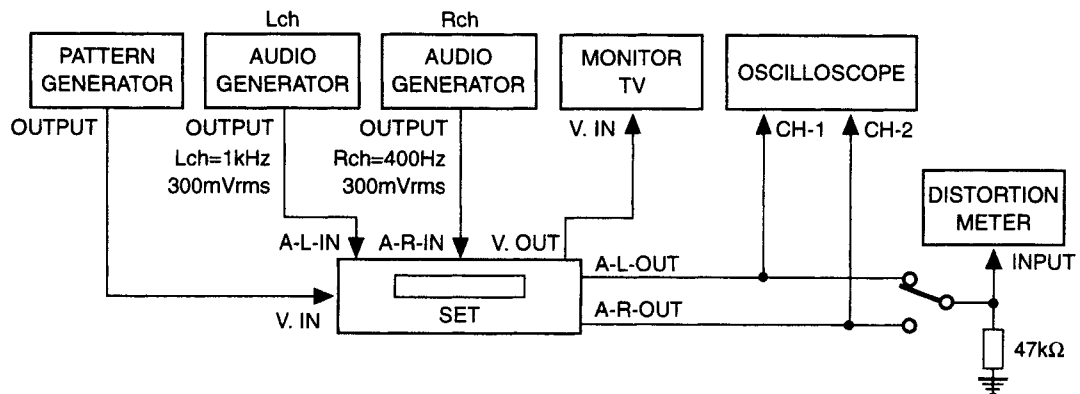
Measuring Equipment : TWO OSCILLOSCOPES
TV MONITOR
DISTORTION METER

Check Point : VIDEO = TV MONITOR
AUDIO = OSCILLOSCOPE
STEREO INDICATOR (FIP)

Check Method : (1) Playback the prerecorded, PAL reference Hi-Fi TEST tape and check that the colour bar is displayed correctly.
(2) Check that the AUDIO output for Lch is 1kHz and check that the Rch output is 400Hz.
(3) Check that the STEREO L and R INDICATORS light.

4. AUDIO SELF-RECORD AND PLAYBACK CHECK (NORMAL / Hi-Fi)

Connections:



Settings:

- **OSCILLOSCOPE**
TIME / DIV : 1 ms
VOLTS / DIV : CH-1=0.2V / CH-2=0.2V
- **AUDIO GENERATOR**
Lch=1kHz / 300m Vrms / Rch=400Hz / 300m Vrms
- **PATTERN GENERATOR**
PAL COLOR BAR

Mode : REC

Test Signal : VIDEO / PAL COLOR BAR
AUDIO / Lch=1kHz / Rch=400Hz

Measuring Equipment : OSCILLOSCOPE / TV MONITOR / PATTERN GENERATOR
TWO AUDIO GENERATOR

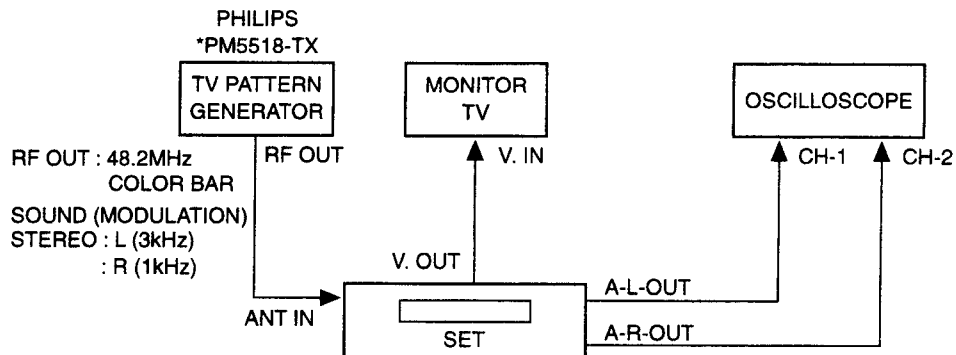
Check Point : VIDEO OUTPUT / AUDIO OUTPUT

Check Method : (1) Record the AUDIO Lch (1kHz) and Rch (400Hz) signals on a blank tape, or an old tape that can be erased.
(2) Playback the tape recorded in (1) and check that the sound is normal. Press the AUDIO SELECT key on the remote control and check that the Lch and Rch output for the STEREO IND. display is as shown below.

Key Press	STEREO INDICATOR		AUDIO OUTPUT	
	Lch	Rch	Lch	Rch
Initial	○	○	1kHz	400Hz
1st	○	×	1kHz	1kHz
2nd	×	○	400Hz	400Hz
3rd	×	×	1kHz + 400Hz	1kHz + 400Hz

5. STEREO AND DUAL FUNCTION CHECK

Connections:



Settings:

- **PM5518-TX**
 - FREQUENCY : 48.25MHz (2ch)
 - PATTERN : COLOR BAR (PAL)
 - MODULATION : STEREO or DUAL L (3kHz) / R (1kHz)
- **OSCILLOSCOPE**
 - TIME / DIV : 1ms / COUPLING : AC
 - VOLTS / DIV : CH-1=0.2V / CH-2=0.2V
 - PROBE : 1 : 1

Mode : TUNER 4CH

Test Signal : VIDEO / PAL COLOR BAR
AUDIO / STEREO Lch=3kHz / Rch=1kHz

Measuring Equipment : OSCILLOSCOPE / TV MONITOR / PM5518-TX

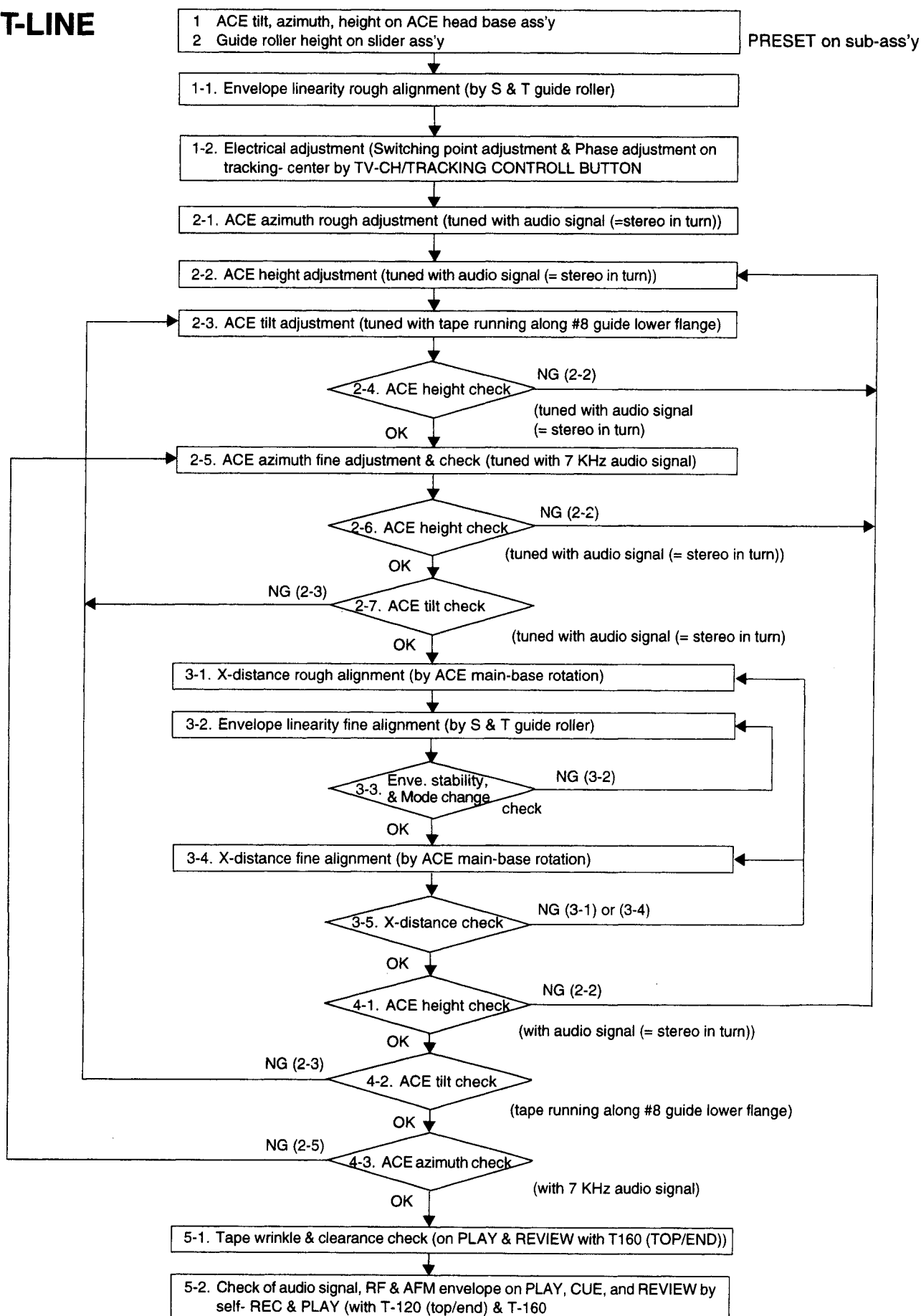
Check Point : AUDIO OUTPUT Lch / Rch

Check Method :

- (1) Set the sound for PM5518-TX to STEREO and receive a signal on 2ch (48.25MHz). Check that STEREO appears on the OSD (for two seconds). Check that the AUDIO OUTPUT for Lch is 3kHz and check that the output for Rch is 1kHz. (Check that both the STEREO L and R indicator on the FIP are ON.)
- (2) Set the sound for PM5518-TX to DUAL and receive a signal on 2ch (48.25MHz). Check that DUAL appears on the OSD (for two seconds). Check that the AUDIO OUTPUT for Lch is 3kHz and check that the output for Rch is 1kHz. (Check that both the STEREO L and R indicator on the FIP are ON.)

TAPE TRANSPORTATION ALIGNMENT PROCESS

OUT-LINE



DETAIL EXPLANATION

1. PRESET

1-1. Envelope linearity rough alignment

Please playback and check RF-envelope in SP test tape, and make envelope form flat by S & T-guide roller height aligned with slit-driver (on shifted-tracking position by TV-CH/TRACKING CONTROL BUTTON. And adjust to best judge point for envelope).

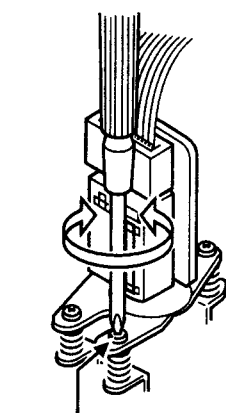
1-2. Electrical adjustment

According to electrical adjustment spec., please adjust switching point.(See page 3)

2. ACE head rough adjustment

2-1. ACE azimuth rough adjustment (by ACE-side-screw alignment)

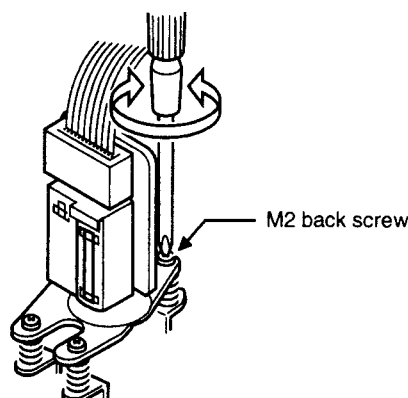
Please playback and check audio-signal in test tape, and align ACE-side-screw height roughly make signal maximum.



M2 side screw

2-2. ACE height adjustment (by ACE-back-screw alignment)

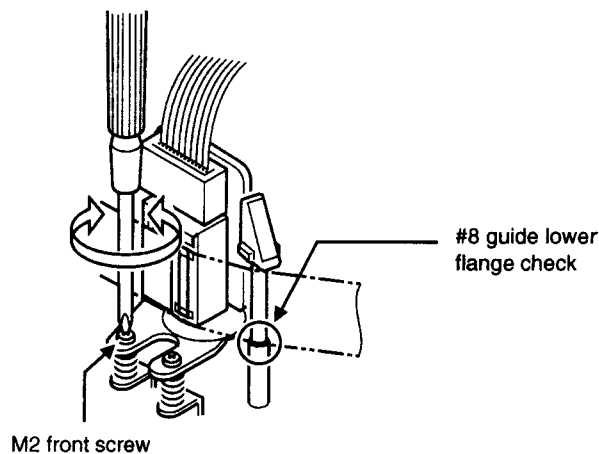
Please playback and check audio-signal in test tape, and align ACE-back-screw height to make signal maximum flat in order to suit ACE-height to tape running height.



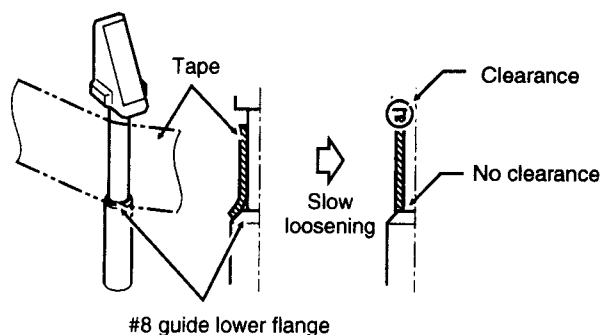
M2 back screw

2-3. ACE tilt adjustment (by ACE-front-screw alignment)

Please align ACE-front-screw height on CUE or PLAY (CUE is better) to make tape run along #8 guide lower flange. (This process is easier. 1st step : to make tape run below lower flange. 2nd step : to make tape running height higher and higher slowly until wrinkle disappears.)



M2 front screw



2-4. ACE height check

By the same process as (2-2) re-check the ACE height.
(If NG, refer to (2-2) height adjustment)

2-5. ACE azimuth fine adjustment & check

By ACE-side-screw, please playback and check 7 KHz audio signal (monaural) in test tape, and align ACE-side-screw height to get maximum level of 7 KHz signal.

2-6. ACE height check

By the same process as (2-2) re-check the ACE height.
(If NG, refer to (2-2) height adjustment)

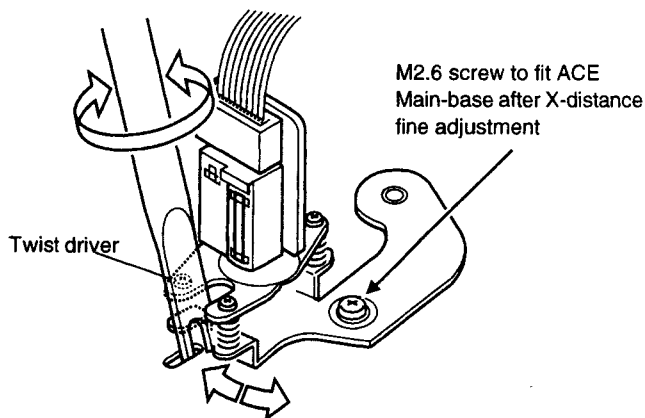
2-7. ACE tilt check

By the same process as (2-3), please check tape running height to #8 guide lower flange as (2-3) process.
(If NG, refer to (2-3) Tilt adjustment)

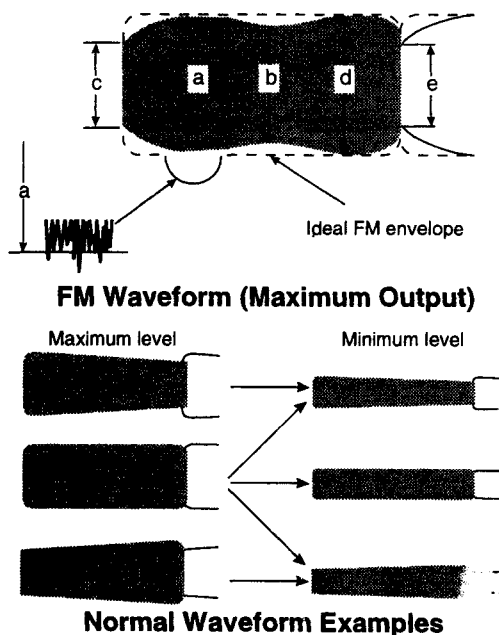
3 Linearity & X-distance adjustment

3-1. X-distance rough adjustment

1. Connect the CH-1 oscilloscope to TP of V-ENV and CH-2 to TP of CTL. At this time, trigger the oscilloscope externally with the signal (Video Switching Pulse) from TP of V-SWP.
2. Play the test tape (Stairstep).
3. Use the Channel ∇/\blacktriangle buttons to tune the tracking to center position. Adjust point ACE main-base rotation twisted with slit-driver (or mimus-driver) so that the FM envelope output at TP of V-ENV reaches a maximum.



4. Using the Channel ∇/\blacktriangle buttons. Perform the following 3 steps (5-7) by moving the TP of CTL waveform in both positive (+) and negative (-) directions in 3 ms increments.
5. Refer to the figure below. Read the level of portion (a) of the waveform. If the waveform is serrated at point (a), adjust the level so that the serrations are as smooth as possible (refer to the figure).



6. As shown in the equation below, read the FM waveform value at point (b) and make sure that:

$$\frac{b}{a} \geq 0.75 \text{ or } 20 \log \frac{b}{a} \geq -2.5 \text{ dB}$$

7. Read the values at points (c) and (d) [drum input and output] and make sure that:

$$\frac{c}{a} \geq 0.75 \text{ and } \frac{d}{a} \geq 0.75 \text{ or}$$

$$20 \log \frac{c}{a} = -2.5 \text{ dB and}$$

$$20 \log \frac{e}{a} = -2.5 \text{ dB}$$

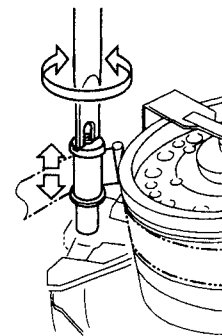
NOTE:

Read the minimum levels for (b), (c), and (d).

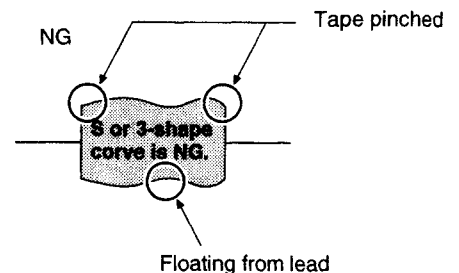
3-2. Envelope linearity fine alignment

Please playback and check RF-envelope in EP (NTSC) (or LP (CCIR) or SP (SP only set)) test tape, and make envelope form flat by S & T-guide roller (on shifted-tracking position).

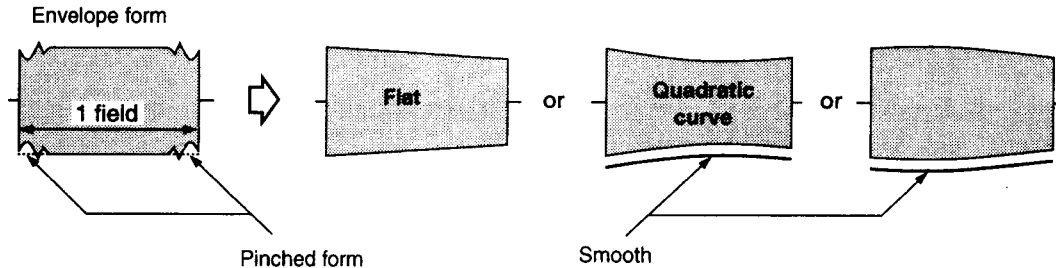
1. please tighten S & T-guide roller to make RF-envelope around switching point pinched.
2. Please loosen S & T-guide roller slowly.
3. Please stop loosening at the point, where envelope linearity is flat or loose quadratic curve and envelope is increased and decreased parallelly by tracking-shift. If over-loosening, please return (3-2-1).



(Note)



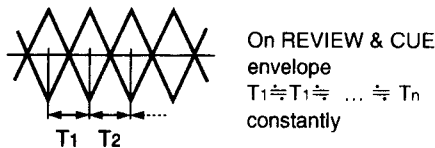
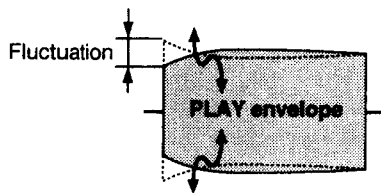
4. Please judge RF-envelope form according to spec. table. If NG, please return (3-2-1). Please do not make linearity in specification unnaturally, please make tape run along drum-lead priority. If NG, please check lead or heads of drum.



3-3. Envelope stability and mode change check

Please judge below mentioned items according to spec. table. If NG, please return (3-2)

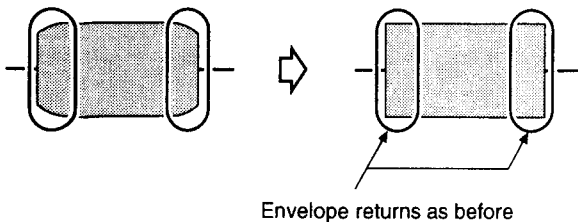
1. Envelope stability on PLAY, REVIEW, & CUE mode
Envelope fluctuation should be in specification.



On REVIEW & CUE envelope
 $T_1 \approx T_2 \approx \dots \approx T_n$
constantly

2. Time until envelope returns as before after mode-change (REVIEW → PLAY, STOP → PLAY, loading → PLAY)

Time until envelope returns as before should be in specification.



3-4. X-distance fine adjustment

Please playback and check RF-envelope in EP (NTSC) {or LP (CCIR) or SP (SP only set)} test tape, and make envelope maximum closer to position after (3-1) by ACE main-base rotation (on tracking-center position). After adjustment, please tighten 1 piece of M2.6 screw to fit ACE main-base.

3-5. X-distance check on play-mode on all speeds

Please re-check X-distance as process (3-1) & (3-4). Priority arrangement of X-distance precision is "EP > LP > SP". (If NG (3-1) or (3-4))

And lag time of SP envelope maximum tracking to EP's (LP's on CCIR set) one should be 3 ms or less. If NG, please check height difference between head by head on drum.

4 ACE head re-check

4-1. ACE height re-check (checked by the same process as (2-6))

Please re-check and judge audio height as the same process as (2-6) according to spec. table. (If NG (2-2) height adjustment)

4-2. ACE tilt re-check (by the same process as (2-7))

Please re-check if tape run along #8 guide lower flange as (2-7)
If NG (2-3) Tilt adjustment)

4-3. ACE azimuth re-check (by the same process as (2-5))

Please playback 7 KHz audio signal, and judge audio azimuth according to spec. table.

If NG (2-5) azimuth fine adjustment)

If OK, please put down lock tile 601 on tilt & azimuth screw.

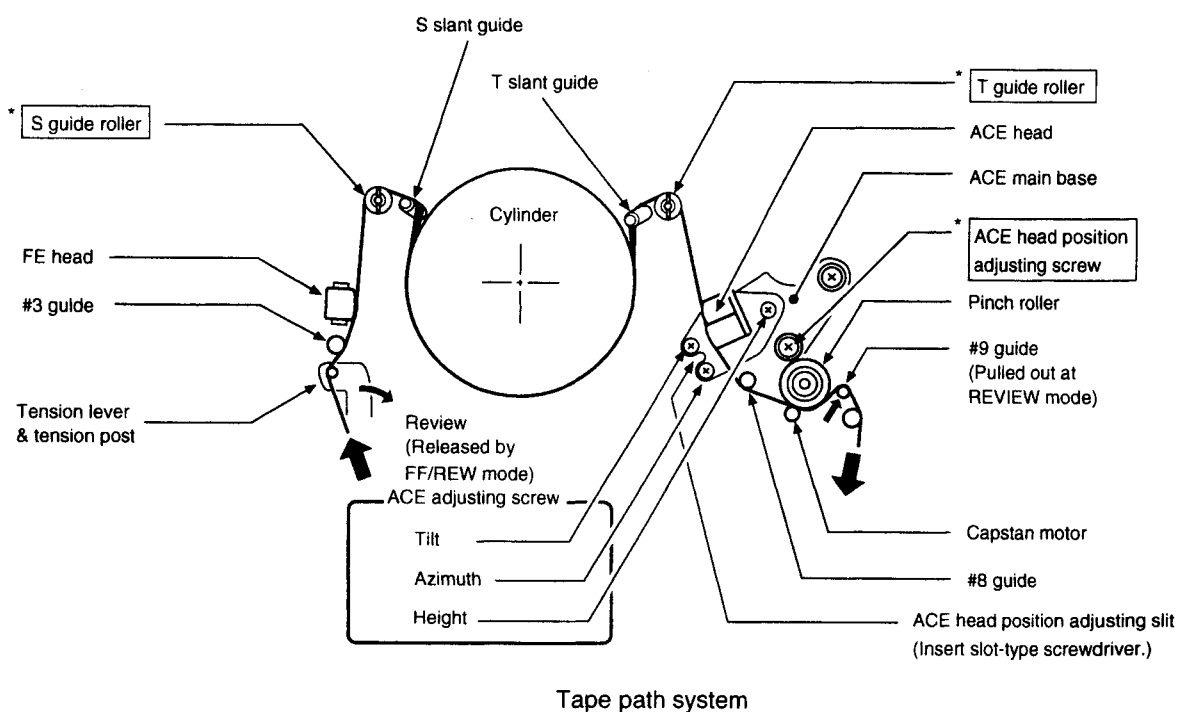
5 Tape wrinkle check etc.

5-1. Tape wrinkle & clearance on play & review by T160 (TOP/END))

Please check tape wrinkle by T-160 and tape running height along datum guide flange. (check modes : PLAY, CUE, REVIEW check tape position : top & end)

If transport has big wrinkle to damage, please check tension and guide inclination & height. If tape does not run along datum guide flange, please align again or check guide precision.

CHECK POINTS	Forward	Reverse	Necessary condition
#3 guide lower flange	important check	without	no damage
S guide roller upper	check	important check	no clearance & no damage
T guide roller upper	important check	check	no clearance & no damage
#8 guide lower flange	important check	check	no damage
#8 guide upper flange	important check	check	clearance on play/no damage
#8 ~ Capstan tape twist	important check	important check	no twist or small twist
#9 guide upper & lower	without	important check	no damage



5-2. Check of audio signal, RF & AFM envelope

Please check audio signal, RF & AFM envelope on PLAY, CUE, and REVIEW according to specification table by self-REC & PLAY with T-120 (top/end) & T-160 (top/end).

PERIODIC MAINTENANCE

The following procedures are recommended for maintaining optimum performance and reliability of this video cassette recorder.

CLEANING

For cleaning, use a lint-free cloth or gauze dampened with alcohol.

TAPE TRANSPORT SYSTEM

1. The tape transport system components should be cleaned after every 500 hours of use.
2. Since the above parts come in direct contact with video tape, they tend to collect dust particles. If allowed to accumulate, dust may lead to damage to the video tape and above parts.
3. After cleaning with alcohol, allow the parts to dry thoroughly before using a cassette tape.

NOTE:

- When cleaning the video heads on the upper drum, do not clean them with a vertical stroke.
- Use only a gentle back and forth motion in the direction of the tape path.

REEL DRIVE SYSTEM

1. The reel drive system components should be cleaned after every 1000 hours of use.
2. The above revolving parts are of rubber or come in direct contact with rubber parts. Dust on rubber accumulates and interferes with proper operation.
3. Avoid using excessive alcohol when cleaning rubber parts.

SERVICE SCHEDULE FOR MAIN COMPONENTS

The following table lists the parts which should receive periodic servicing at the recommended intervals.

Ref. No	Part No.	Description	Periodic Service Schedule (operating hours)				
			1000	2000	3000	4000	5000
G001	67D70311921	Cylinder Ass'y for 2 Head Deck No.59502	○	●	○	●	○
G001	67D70311920	Cylinder Ass'y for 4 Head Deck No.59503	○	●	○	●	○
G001	67D70311924	Cylinder Ass'y for Hi-Fi Deck No.59504	○	●	○	●	○
G542	67D70342117	Belt, Pulley		●		●	
G555	67D70326756	Pinch, Ass'y		●		●	
K200	67D70316106	Gear, Clutch, Ass'y		●		●	
K250	67D70326753	Band, Brake Ass'y		●		●	
K330	67D70326749	Lever, S. Brake Ass'y		●		●	
K340	67D70326760	Lever, T. Brake Ass'y		●		●	
G480	67D70318793	Head, ACE. Ass'y			●		
B410	67D70322542	Motor Loading Ass'y			○		
B560	67D70125755	Motor Capstan Ass'y			○		
K110	67D70331600	Disk, S Reel			○		
K140	67D70331601	Disk, T Reel			○		

Standard Service Periods

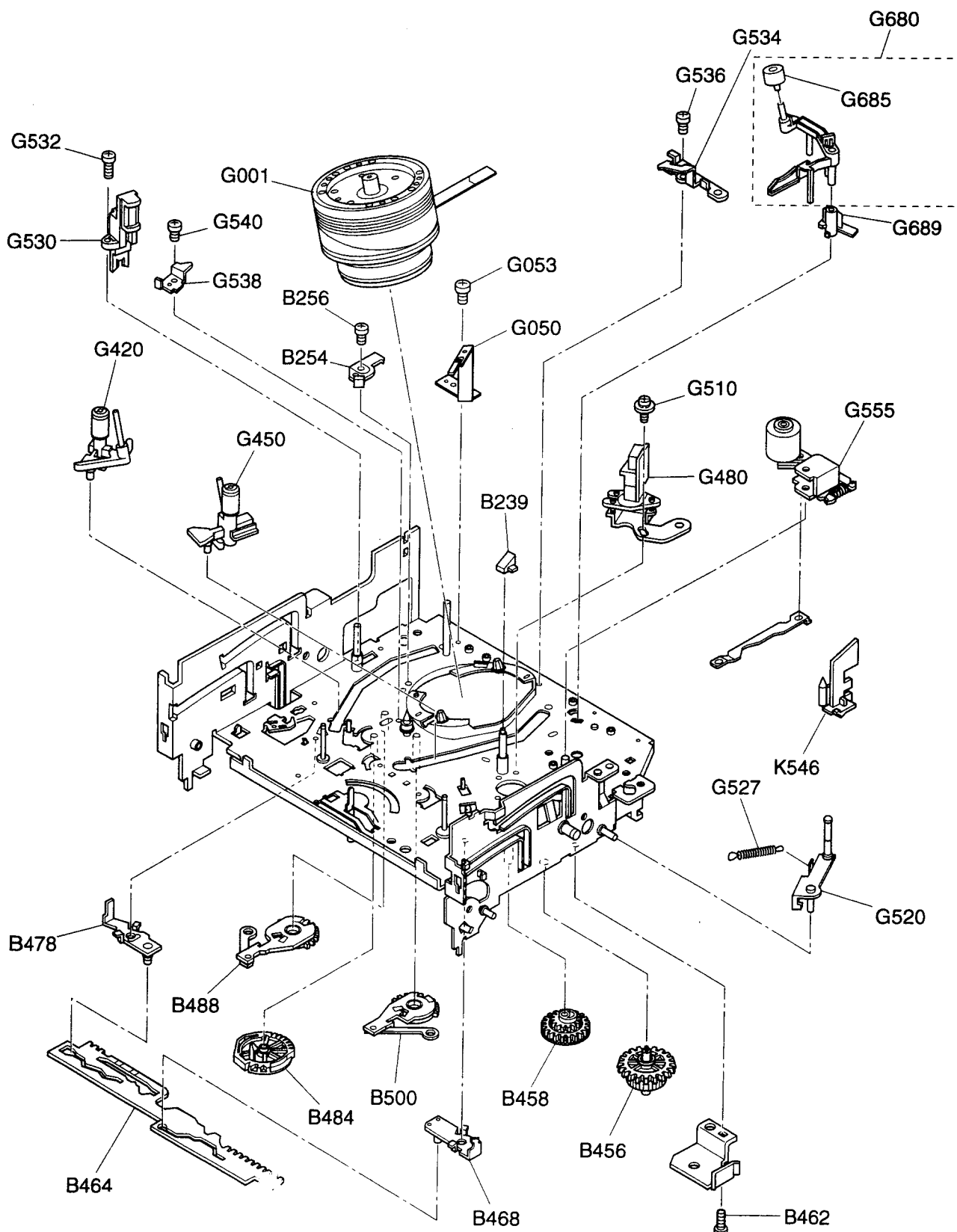
- Check and replace if necessary
● Replace

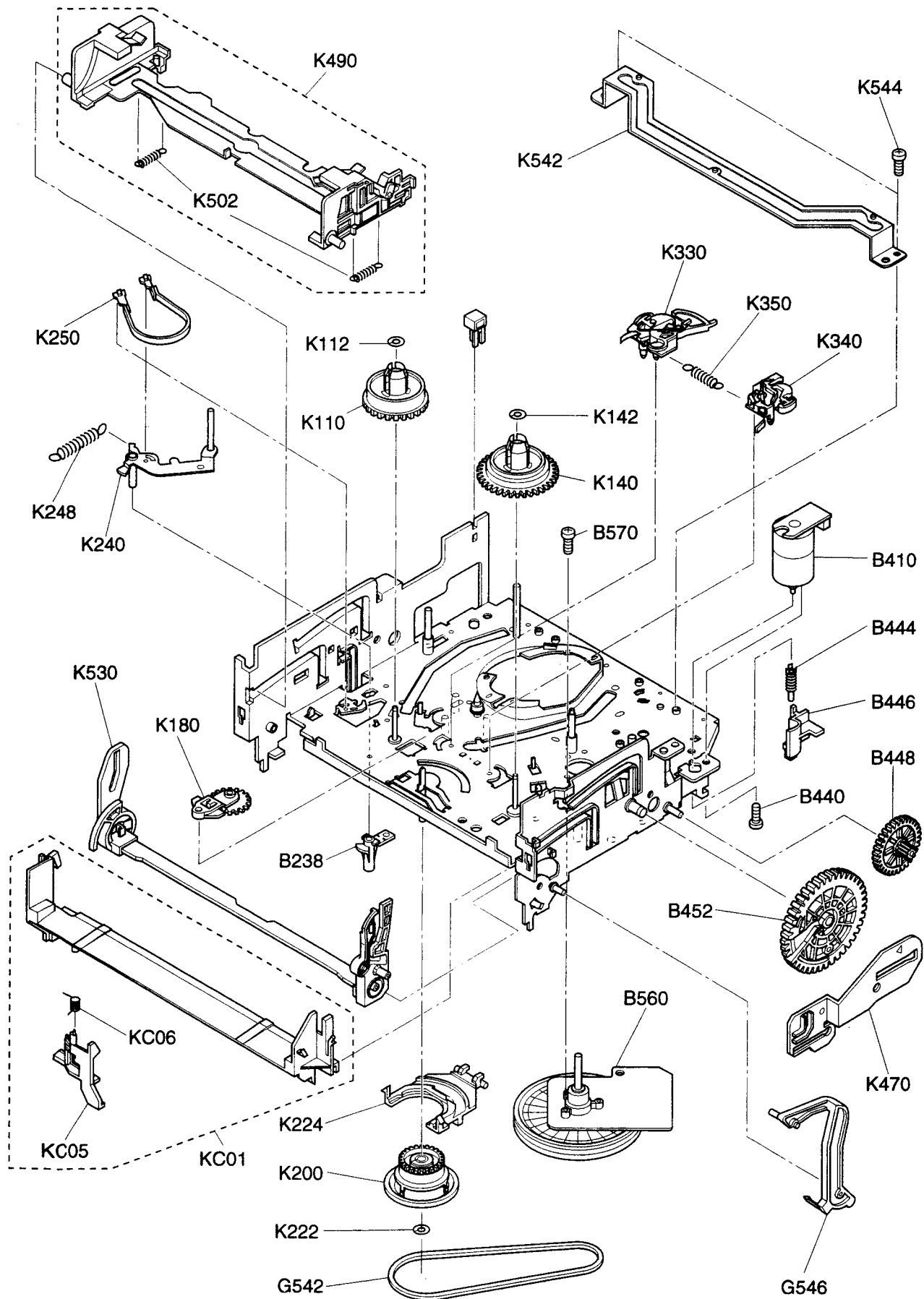
NOTE:

Cleaning and replacement of the belts should be undertaken every 2 years even if the unit is not used frequently.

SERVICING DIAGRAM AND PARTS LIST

1. CASSETTE DECK ASSEMBLY





DECK MECHANISM (59502, 59503, 59504)

(59502) NV3200 FOR 2 HEAD MODEL, (59503) NV3400 FOR 4 HEAD MODEL, (59504) NV3600 FOR HI-FI MODEL

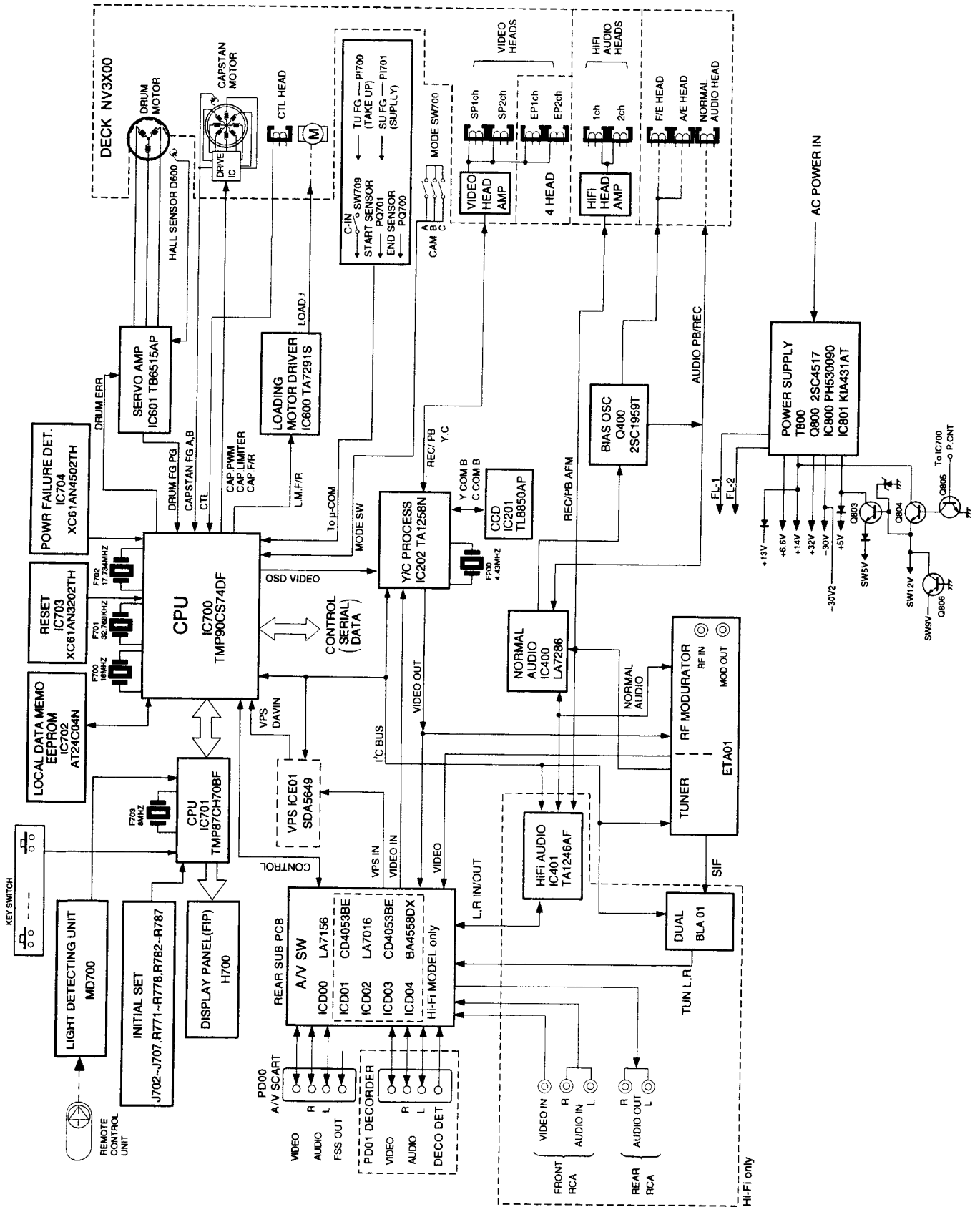
Ref. No.	TN Parts No.	Part No.	Description
B238	7037-98-24	67D70379824	SLEEVE,TENTIN
B239	7036-82-83	67D70368283	CAP,#8 GUIDE
B254	7037-34-70	67D70373470	PLATE,CYLINDER C
B256	7039-19-07	67D70391907	SCREW,PTTS 2.6*5 SZN
B410	7032-25-42	67D70322542	MOTOR,LOADING ASS'Y
B440	7039-13-45	67D70391345	PP 3*3 SZN
B444	7033-34-98	67D70333498	GEAR,WORM
B446	7036-16-87	67D70361687	HOLDER,WORM
B448	7033-34-97	67D70333497	GEAR,WORM WHEEL
B452	7033-34-96	67D70333496	GEAR,FL.CAM
B456	7036-82-79	67D70368279	GEAR,JOINT 1
B458	7036-82-78	67D70368278	GEAR,JOINT 2
B462	7039-19-07	67D70391907	SCREW,PTTS 2.6*5 SZN
B464	7037-60-41	67D70376041	SLIDER,CAM
B468	7032-67-52	67D70326752	LEVER,PINCH DRIVE ASS'Y
B478	7032-67-51	67D70326751	LEVER,TENTION DRIVE ASS'Y
B484	7033-34-99	67D70333499	GEAR,LOADING DRIVE
B488	7032-25-40	67D70322540	LEVER,S.LOADING ASS'Y
B500	7032-25-41	67D70322541	LEVER,T.LOADING ASS'Y
B560	7012-57-55	67D70125755	MOTOR,CAPSTAN ASS'Y
B570	7039-10-24	67D70391024	SCREW,PTTB 2.6*6 SZN
G001	7031-19-21	67D70311921	CYLINDER ASS'Y FOR 2 HEAD MODEL
G001	7031-19-20	67D70311920	CYLINDER ASS'Y FOR 4 HEAD MODEL
G001	7031-19-24	67D70311924	CYLINDER ASS'Y FOR HI-FI MODEL
G050	7032-58-73	67D70325873	GROUND,BRUSH ASS'Y(NEW-V)
G053	7039-19-07	67D70391907	SCREW,PTTS 2.6*5 SZN
G420	7032-25-36	67D70322536	SLIDER,SUPPLY ASS'Y
G450	7032-25-37	67D70322537	SLIDER,TAKE UP ASS'Y
G480	7031-87-93	67D70318793	HEAD,ACE.ASS'Y
G510	7039-19-36	67D70391936	SCREW,PTTS 2.6*5.6+SW+2W
G520	7032-67-45	67D70326745	LEVER,#9 GUIDE ASS'Y
G527	7035-64-16	67D70356416	SPRING,#9 GUIDE
G530	7018-30-29	67D70183029	HEAD,FULL ERASE
G532	7039-19-10	67D70391910	SCREW,PTTS 2.6*8 SZN
G534	7037-34-61	67D70373461	PLATE,CYLINDER A
G536	7039-19-07	67D70391907	SCREW,PTTS 2.6*5 SZN
G538	7037-34-62	67D70373462	PLATE,CYLINDER B
G540	7039-19-07	67D70391907	SCREW,PTTS 2.6*5 SZN
G542	7034-21-17	67D70342117	BELT,PULLEY
G546	7036-34-91	67D70363491	LEVER,FL.DOOR
G555	7032-67-56	67D70326756	PINCH,ASS'Y
G680	7032-67-54	67D70326754	LEVER,HEAD CLEANER ASS'Y
G685	7032-67-55	67D70326715	ROLL CLEANER,SUB ASS'Y
G689	7037-98-35	67D70379835	SLEEVE,HEAD CLEANER
K110	7033-16-00	67D70331600	DISK,S REEL

DECK MECHANISM (59502, 59503, 59504)

(59502) NV3200 FOR 2 HEAD MODEL, (59503) NV3400 FOR 4 HEAD MODEL, (59504) NV3600 FOR Hi-Fi MODEL

Ref. No.	TN Parts No.	Part No.	Description
K112	7039-61-91	67D70396191	LUMIRROR 2.1*5*0.5(RED)
K140	7033-16-01	67D70331601	DISK,T REEL
K142	7039-61-91	67D70396191	LUMIRROR 2.1*5*0.5(RED)
K180	7031-61-07	67D70316107	LEVER,IDLE.ASS'Y
K200	7031-61-06	67D70316106	GEAR,CLUTCH,ASS'Y
K222	7039-61-91	67D70396191	LUMIRROR 2.1*5*0.5(RED)
K224	7036-34-93	67D70363493	LEVER,UP DOWN
K240	7032-67-48	67D70326748	LEVER,TENTION ASS'Y
K248	7035-64-15	67D70356415	SPRING,TENTION LEVER
K250	7032-67-53	67D70326753	BAND,BRAKE ASS'Y
K330	7032-67-49	67D70326749	LEVER,S.BRAKE ASS'Y
K340	7032-67-60	67D70326760	LEVER,T.BRAKE ASS'Y
K350	7035-64-02	67D70356402	SPRING,MAIN BRAKE
K470	7037-60-42	67D70376042	SLIDER,FL.DRIVE
K490	7032-49-02	67D70324902	HOLDER,FL.CASSETTE ASS'Y
K502	7035-63-94	67D70356394	SPRING,FL.LEVER-LR
K530	7032-49-03	67D70324903	LEVER,FL.ARM ASS'Y
K542	7037-20-89	67D70372089	BRACKET,FL.TOP
K544	7039-19-07	67D70391907	SCREW,PTTS 2.6*5 SZN
K546	7036-16-88	67D70361688	GUIDE,FL.CASSETTE,DOOR
KC01	7032-49-06	67D70324906	GUIDE,FL.CASSETTE ASS'Y(VCP)
KC05	7036-34-92	67D70363492	LEVER,REC.INHIBIT
KC06	7035-64-04	67D70356404	SPRING,REC.INHIBIT

2. BLOCK DIAGRAM



3. TERMINOLOGY REFERENCE

	CAD-Code	Numerical Value
R	RA1R1F	1R1 = 1.1 Ω
	RA180F	180 = $18 \times 10^0 = 18 \Omega$
	RA821F	821 = $82 \times 10^1 = 820 \Omega$
	RC102F	102 = $10 \times 10^2 = 1 \text{ K}\Omega$
	RC103F	103 = $10 \times 10^3 = 10 \text{ K}\Omega$
	RC104F	104 = $10 \times 10^4 = 100 \text{ K}\Omega$
C	CL1R5H	1R5 = 1.5 pF
	CA200C	200 = $20 \times 10^0 = 20 \text{ pF}$
	CA333B	333 = $33 \times 10^3 = 33000 \text{ pF} = 0.033 \mu\text{F}$
	CA104F	104 = $10 \times 10^4 = 0.1 \times 10^6 \text{ pF} = 0.1 \mu\text{F}$
	ES1/50H	1/50 = $1\mu\text{F}/50\text{V}$
L	IR5J	IR5 = 1.5 μH
	330J	330 = $33 \times 10^0 = 33 \mu\text{H}$
	181J	181 = $18 \times 10^1 = 180 \mu\text{H}$
	68NJ	68N = $68 \times 10^{-9}\text{H} = 68 \text{ NH} = 0.068 \mu\text{H}$

The following terms have been changed as a result of the use of a new CAD system.

Description	Ref. No.	CAD Code
♦ IC	IC101	LA3373, MT
		No Connection Description (LA3373) Circuit Ref. Number Head Name
♦ Transistor	Q101	2SC2785T, E, F
		Rank No Connection Description (2SC2785) Circuit Ref. Number Head Name
♦ Diode	D101	1S2835T
		No Connection Description (1S2835) Circuit Ref. Number Head Name
♦ Resistor	R101	RC102F
		Tolerance F: $\pm 1 \%$ G: $\pm 2 \%$ J: $\pm 5 \%$ (No Mark) K: $\pm 10\%$ M: $\pm 20\%$ H: No Connection Resistance ($10 \times 10^2 = 1000 \text{ ohms}$) Carbon Resistor 1/6W Circuit Ref. Number Head Name
	R102	RA1R1
		Resistance (1.1 ohm) Decimal Point Mark Chip Resistor 2125 Type 1/10W
♦ Capacitor (Chip)	C101	CA200C
		Temperature Characteristic C: CH, CJ, CK U: UJ S: SL B: B D: D Capacitance ($20 \times 10^0 = 20\text{pF}$) Chip Capacitor 2125 Type Circuit Ref. Number Head Name
♦ Capacitor (Ceramic)	C101	SL1R5H or S or Z
		No Connection Capacitance (1.5pF) Decimal Point Mark Characteristic (Ceramic SL)
♦ Capacitor (Electrolytic)	C101	ES1/50H or F or Z
		No Connection Voltage Proof (50V) Capacitance (1 μF) Electrolytic SSM Type

Description	Ref.No.	CAD Code	
◆ Hybrid IC	IC102	HIC*****	Code No. (3 ~ 8 Column → 11*****0)
◆ CR Component	CR101	CR*****	Code No. (3 ~ 8 Column → 11*****0)
◆ In-Line Block	IB101	IB*****	Code No. (3 ~ 8 Column → 11*****0)
◆ Surge Absorber	D102	Z*****	Code No. (3 ~ 8 Column → 13*****0)
◆ LED	LD101	LED*****	Code No. (3 ~ 8 Column → 14*****0)
◆ LCD	H101	LCD*****	Code No. (3 ~ 8 Column → 14*****0)
◆ FIP	H102	FIP*****	Code No. (3 ~ 8 Column → 14*****0)
◆ Pilot Lamp	PL101	PL*****	Code No. (3 ~ 8 Column → 14*****0)
◆ Neon Bulb	NE101	NE*****	Code No. (3 ~ 8 Column → 14*****0)
◆ Trimmer Cap.	C102	CT*****	Code No. (5 ~ 9 Column → 1591*****)
◆ CFC Assy	C103	CFC*****	Code No. (5 ~ 9 Column → 1501*****)
◆ Coil	L101	L*****	Code No. (3 ~ 8 Column → 17*****0)
◆ Filter	F101	F*****	Code No. (3 ~ 8 Column → 17*****0)

Description	Type	Capacitance Limit	No Marked Tolerance
Chip	CK, CJ, CH, UJ CH, UJ CH, SL SL, B D	1PF ~ 5PF 6PF ~ 10PF 12PF ~ 470PF 680PF ~ 0.022μF 0.033μF ~ 0.1μF	C (±0.25PF) D (±0.5PF) J (±5%) K (±10%) M (±20%)
Ceramic	General B	1PF ~ 5PF 6PF ~ 10PF 12PF ~ 270PF 100PF ~ 680PF	C D J K
Semi-Conductor	SR BC	0.001μF ~ 0.068μF 0.1μF ~ 0.2μF	K Z (-20% ~ +80%)
Mylar (M)		0.001μF ~ 0.1μF	J
TF		0.1μF ~ 0.47μF	J
PS, NPS		470PF ~ 1000PF	G (±2%), J
ALSICON (AS)		0.1μF ~ 0.22μF	M
Tantalum (TA)		0.15μF ~ 10μF	M
Electrolytic	General	0.1μF ~ 220μF	M

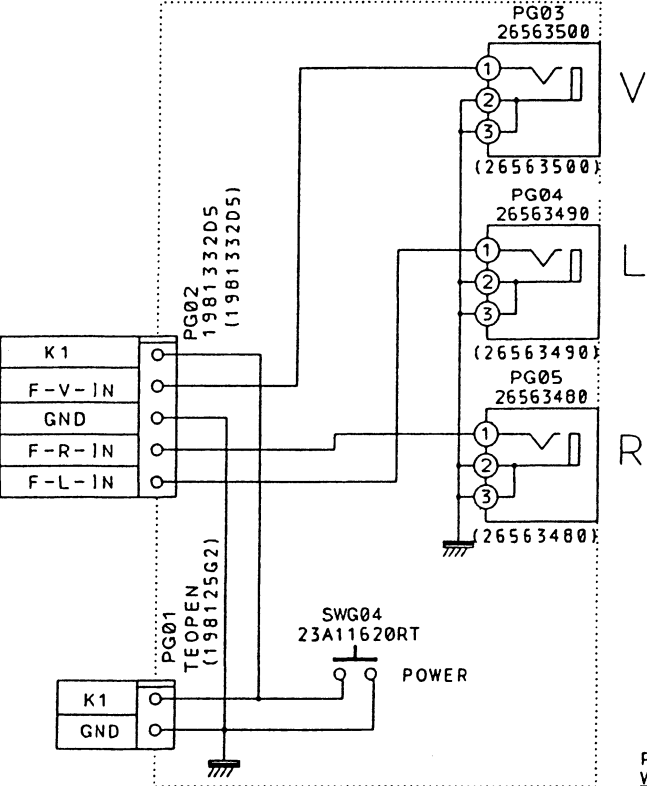
Head	Description	Head Name	Description
ET	Electrolytic Tuner	NE	Neon Bulb
MT	Manual Tuner	PL	Pilot Lamp
PT	Push Button Tuner	C*	Capacitor
K	Relay	R* *	Resistor
MC	Microphone	L	Transformer
SP	Speaker	L	Coil, Inductor
IC	IC, Hybrid IC	F	Ceramic Filter, Crystal
IB	In-Line Block	W	Printed Circuit Board
CR	CR Component	BL	Block PC Ass'y
Q	Transistor	P	Connector Post
D	Diode, Surge Absorber	TP	Check Pin
LD	LED	AJ	Antenna Jack
H	LCD	SW	Switch
H	FIP	VR	Volume

CAD Code	*Capacitor
CA****	Chip Capacitor 2125 Type
CB****	Chip Capacitor 3216 Type
SL****	Ceramic Capacitor SL Type
B****	Ceramic Capacitor B Type
F****	Ceramic Capacitor F Type
CH****	Ceramic Capacitor CH Type
LH****	Ceramic Capacitor LH Type
PH****	Ceramic Capacitor PH Type
RH****	Ceramic Capacitor RH Type
SH****	Ceramic Capacitor SH Type
TH****	Ceramic Capacitor TH Type
UJ****	Ceramic Capacitor UJ Type
SR****	Semi-Conductor Cap. SR Type
BC****	Semi-Conductor Cap. BC Type
M****	Mylar Capacitor
TF****	TF Capacitor
NP****	NPS Capacitor
AS**/**	ALSICON Capacitor
TA**/**	Tantalum Capacitor
ES**/**	Electrolytic Cap. SSM Type
ESL**/**	Electrolytic Cap. SSM-L Type
ESH**/**	Electrolytic Cap. SSM-H Type
ESB**/**	Electrolytic Cap. Bi-Polar
EG**/**	Electrolytic Cap. GSM Type
EE****	Electrolytic Cap. SEM Type

CAD Code	*Capacitor
EA**/**	Electrolytic Cap. Aibis Type
EL**/**	Electrolytic Cap. LSM Type
EH**/**	Electrolytic Cap. HPW Type
CT*****	Trimmer Capacitor

CAD Code	**Resistor
RA****	Chip Resistor 2125 Type
RB****	Chip Resistor 3216 Type
RC****	Carbon Resistor 1/6W S Type
RD****	Carbon Resistor 1/4W U Type
RU****	Carbon Resistor 1/6W U Type
RF****	Carbon Resistor 1/2W S Type
RK**F	Metal Film Resistor 1/4W S ±1%
RL**F	Metal Film Resistor 1/6W S ±1%
RP****	Metal Oxide Resistor 1W S Type
RQ****	Metal Oxide Resistor 2W S Type
RM****	Cement Resistor 5W S Type
RV****	Variable Resistor Vertical Type 6φ
RV**A	Variable Resistor Vertical Metal 6φ
RV**B	Variable Resistor Down Type 6φ
RV**C	Variable Resistor Vertical 6φ 4 pin
PR****	Printed Resistor (on PC Board)

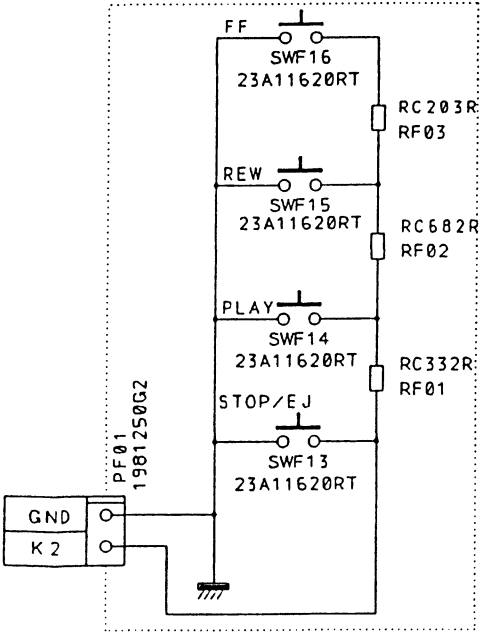
SCHEMATIC DIAGRAM (KEY-L, R) IN COMMON



FACE	TYPE	POWER
A	SWG01	
B	SWG02	
Z	SWG03	
C	SWG04	
Y	SWG05	

FRONT JACK	PG01	PG02
USED	X	●
NO USED	●	X

PCB KEY (L)
WG01 180569110

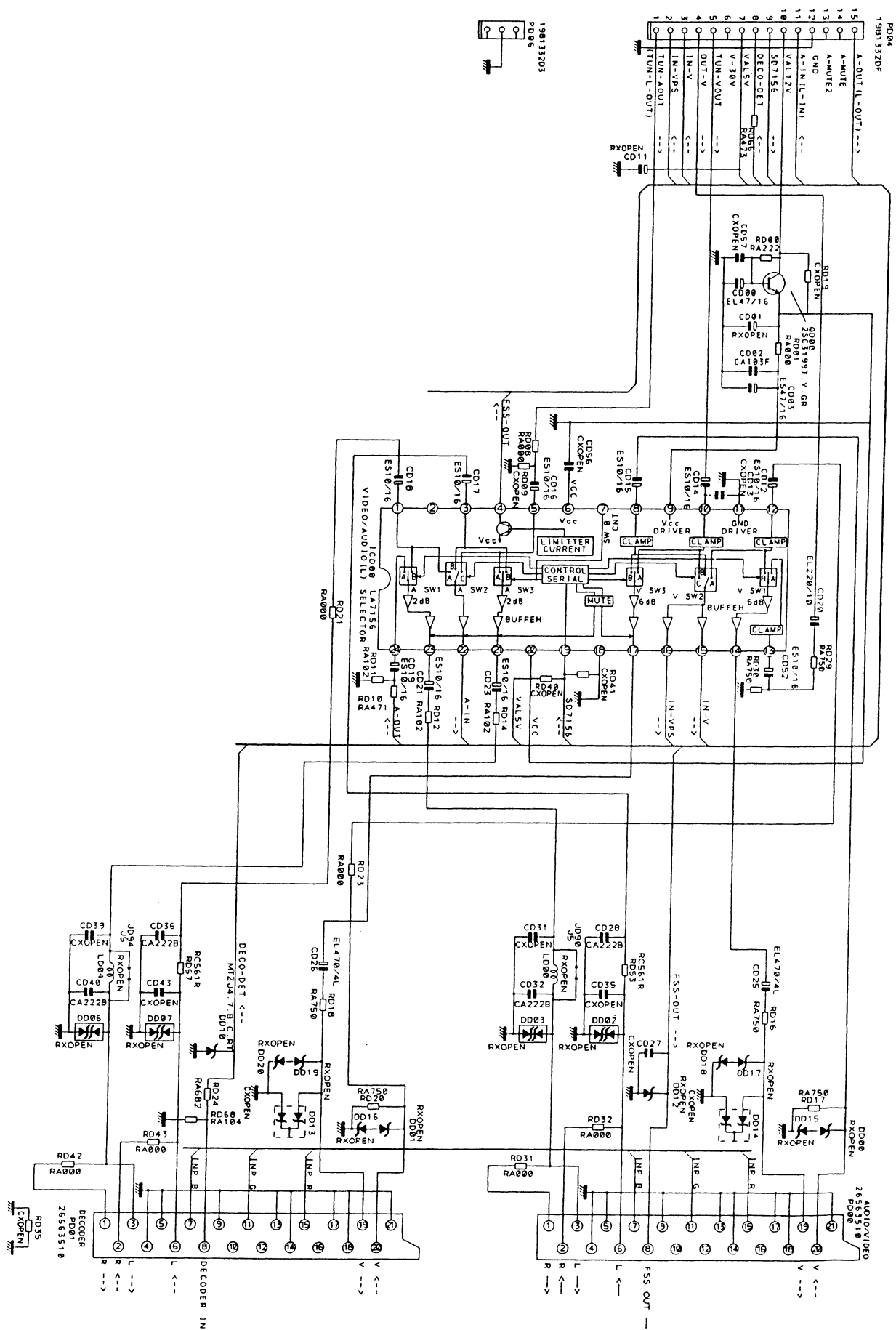


FACE	TYPE	STOP/EJ	PLAY	REW	FF
A	SWF01	SWF02	SWF03	SWF04	
B	SWF05	SWF06	SWF07	SWF08	
Z	SWF09	SWF10	SWF11	SWF12	
C	SWF13	SWF14	SWF15	SWF16	
Y	SWF17	SWF18	SWF19	SWF20	

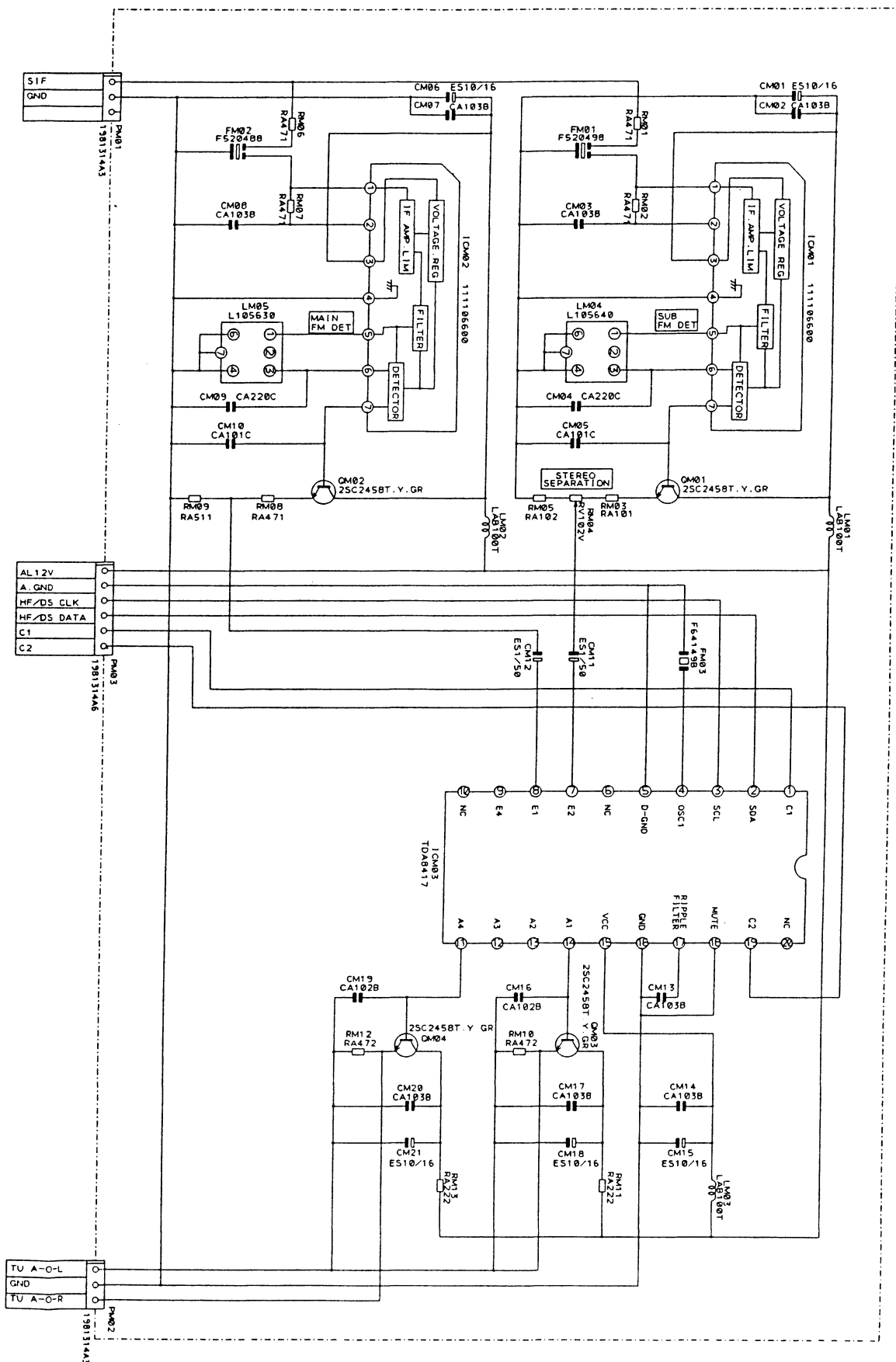
PCB KEY (R)
WG02 180569120

☆ When replacing a function switch (POWER, PLAY, STOP/EJECT, FF, REW) whose position differs according to face type, you can re-install the switch at its original position by noting the location where the switch was removed on the model to be repaired. This manual therefore doesn't give the switch layout for each type, but rather gives one type as an example. Sub circuit boards are not used for models where all function switches are positioned on the main circuit board. When ordering the function switch parts, indicate the Part No. 23A11620 regardless of the type.

~~ALPAC~~ 21176862
BKT (SUB-PCB)





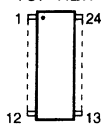


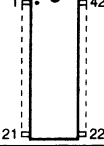


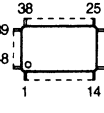

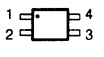
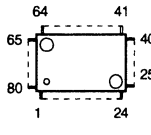

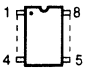
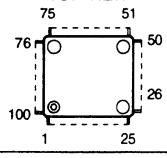

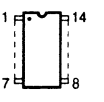
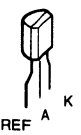
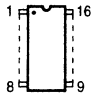
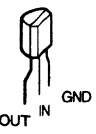
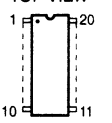
SCHEMATIC DIAGRAM (BL ASSY DUAL) FOR Hi-Fi MODEL



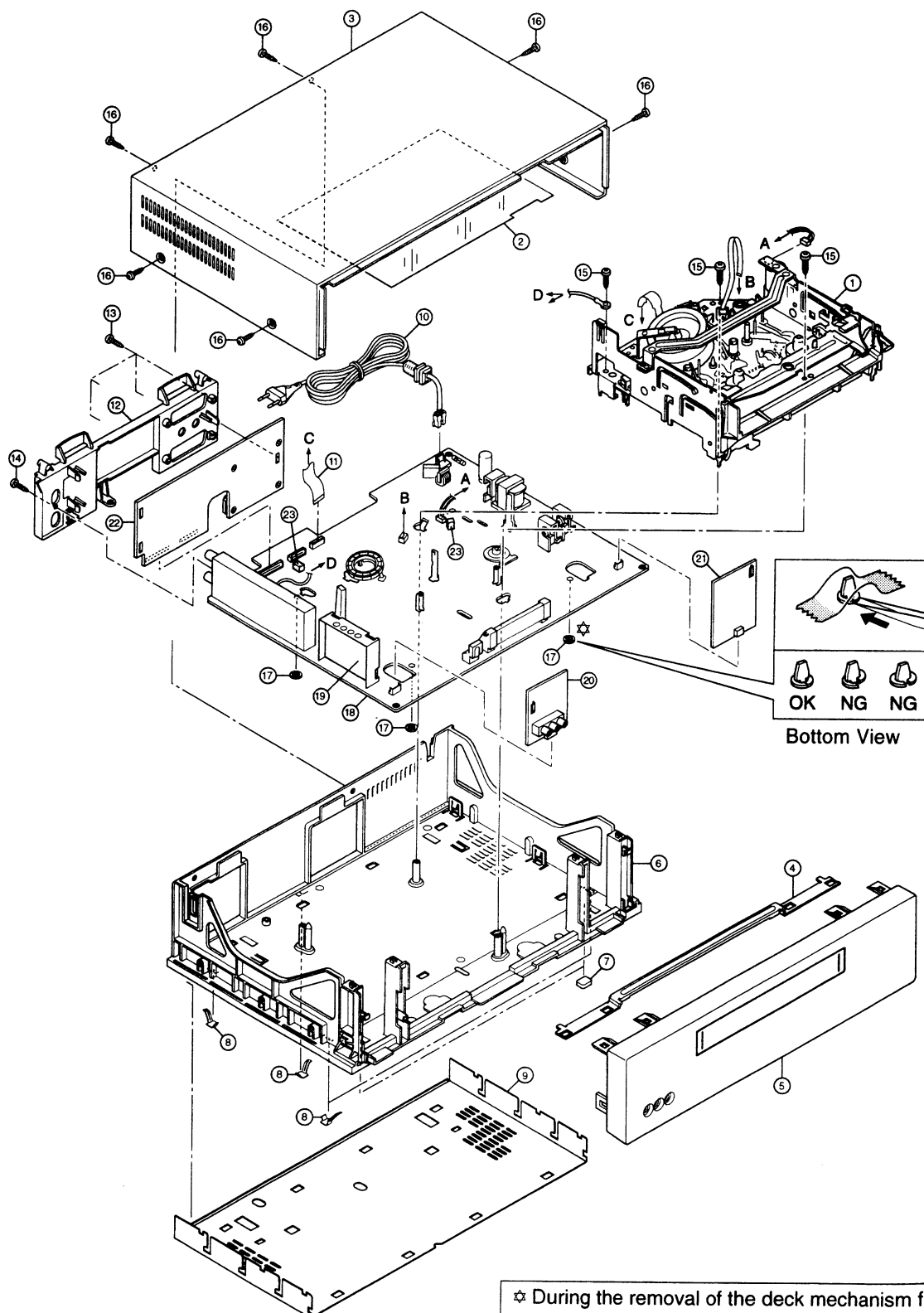
The above CD54 has the correct polarity, but note that there are a few REAR SUB PCBs whose polarity is miss-printed. (Refer to the last page)



5. IC, TRANSISTOR LEAD IDENTIFICATION

<p>TYPE NUMBER</p>  <p>2SD1858T</p>	<p>FRONT VIEW</p>  <p>BA403</p>	<p>TOP VIEW</p>  <p>LA7156 LA7286</p>
 <p>2SA1267 2SC2458T DTC114TST KTC3199T KRC102MT RN1203.TPE4</p>	<p>FRONT VIEW</p>  <p>LA7016</p>	<p>TOP VIEW</p>  <p>TA1258N</p>
 <p>2SA1020</p>	<p>FRONT VIEW</p>  <p>TA7291S</p>	<p>TOP VIEW</p>  <p>TA1246AF</p>
 <p>2SC4517 2SD2396</p>	<p>TOP VIEW</p>  <p>PHOTOCOUPLER PS2561</p>	<p>TOP VIEW</p>  <p>TMP87CH70BF</p>
 <p>2SD1858T</p>	<p>TOP VIEW</p>  <p>AT24C02-10PC AT24C04N-10SC BA4558DX</p>	<p>TOP VIEW</p>  <p>TMP90CS74DF</p>
 <p>2SC1959 2SD2132T</p>	<p>TOP VIEW</p>  <p>SDA5649</p>	
 <p>KIA431AT</p>	<p>TOP VIEW</p>  <p>CD4053BE TL8850AP TB6515AP</p>	
 <p>XC61AN3202TH XC61AN4502TH</p>	<p>TOP VIEW</p>  <p>TDA8417</p>	

6. CABINET & CHASSIS ASSEMBLY



- The figure of the parts Nos, ⑤, ⑫, ⑳, ㉑ differ a little from each models.
- Parts No, ⑲ is specific to the Hi-Fi model only.
- Parts No, ㉒ is specific to 2 scart models. But for the 1 scart models, the scart connector located directly on the Main PCB.

☆ During the removal of the deck mechanism from the main PCB, you could use precision forceps to carefully extract the washer covered with cellophane tape preventing it being lost. Although the washer can be reused if such great care is taken, it is recommended that it is replaced with a brand new washer when the unit is re-assembled. It is therefore a good idea to ensure that these washers are always available from the service center stock.

7. PARTS LIST FOR FINAL ASSEMBLY

CABINET & CHASSIS

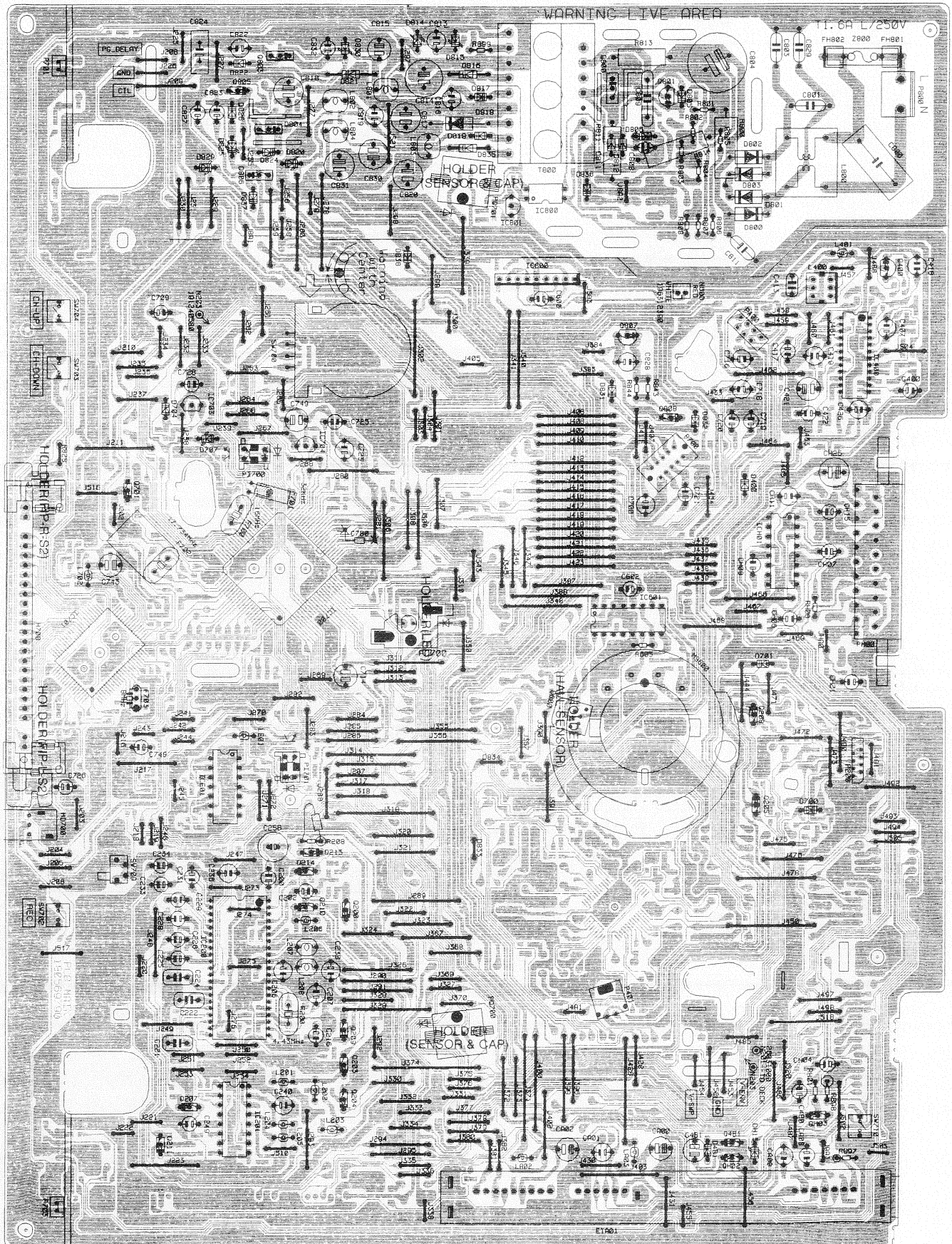
Ref. No.	Part No.	Description
1	59502	DECK MECHANISM NV3200 FOR 2 HEAD MODEL
	59503	DECK MECHANISM NV3400 FOR 4 HEAD MODEL
	59504	DECK MECHANISM NV3600 FOR Hi-Fi MODEL
2	28061380	INSULATOR
3	21046370	COVER (TOP)
4	21176570	BKT (BAR)
5	See inside cover	FACE PLATE ASS'Y
6	22704250	CHASSIS
7	25351080	CUSHION
8	21291250	PLATE SPRING
9	21046380	COVER (BOTTOM)
10	26021630	POWER CORD
11	194001130	FLEXIBLE WIRE ##
12	22129050	REAR PANEL
13	2953316C	DPBB-3X16SSC
14	2955305C	DPPS-3X5SSC
15	2971412A	DPBP-4X12SSA
16	2953312C	DPBB-3X12SSC
☆ 17	29G2059H	WASHER ZOCK-2.6X6X0.5LMH
18*	See inside cover	MAIN CIRCUIT BOARD
19*	37279B0	└BL ASSY DUAL
	See inside cover	KEY CIRCUIT BOARD
20*		└KEY (L) CIRCUIT BOARD
21*		└KEY (R) CIRCUIT BOARD
22*	See inside cover	REAR SUB CIRCUIT BOARD
23	25371610	RUBBER SPACER

For the details marked *, refer to the next page to the last page.

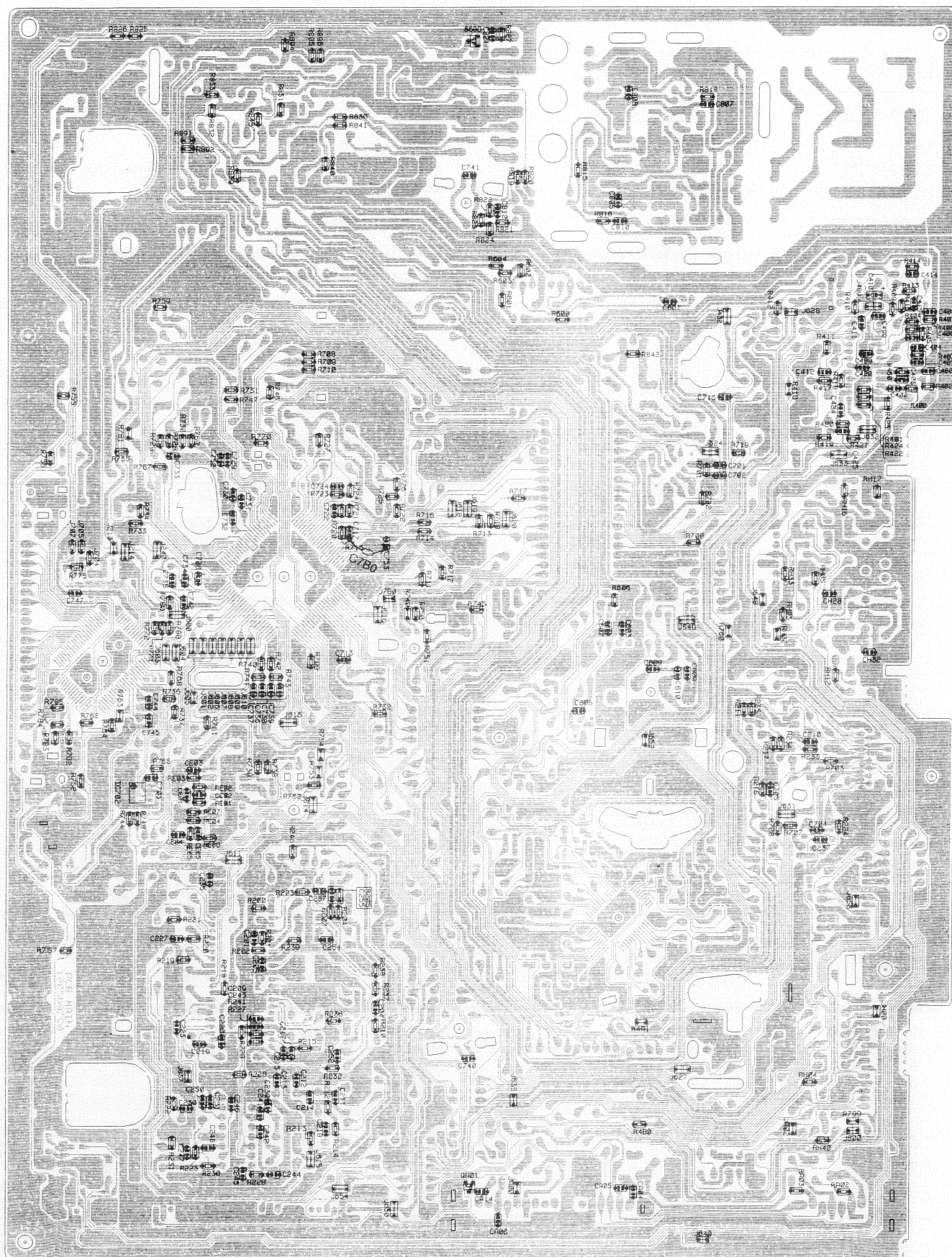
☆ During the removal of the deck mechanism from the main PCB, you could use precision forceps to carefully extract the washer covered with cellophane tape preventing it being lost. Although the washer can be reused if such great care is taken, it is recommended that it is replaced with a brand new washer when the unit is re-assembled. It is therefore a good idea to ensure that these washers are always available from the service center stock.

8. PC BOARD ASS'Y (MAIN) PARTS LOCATION FOR 2 VIDEO HEAD MONAURAL 1 SCART MODEL

PC BOARD ASS'Y (MAIN)



PC BOARD ASS'Y (MAIN)



9. PC BOARD ASS'Y (MAIN) PARTS LIST FOR 2 VIDEO HEAD MONAURAL 1 SCART MODEL

PC BOARD ASSY (MAIN)

Ref. No.	Part No.	Description
C200, C231	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
C201	15712210E	CAPACITOR,CHIP,220PF 50V
C202, C226	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C204, C210	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C205, C220	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C206, C236	1552107G5	CAPACITOR,ELECTROLYTIC,100UF 10V
C207, C426	155322625	CAPACITOR,ELECTROLYTIC,22UF 16V
C209	157A1830E	CAPACITOR,CHIP,0.018UF 25V
C211, C214	15711200E	CAPACITOR,CHIP,12PF 50V
C212, C734	15711800E	CAPACITOR,CHIP,18PF 50V
C213	15788210E	CAPACITOR,CHIP,820PF 50V
C215	15711500E	CAPACITOR,CHIP,15PF 50V
C216, C417	155647425	CAPACITOR,ELECTROLYTIC,0.47UF 50V
C217	157F2720E	CAPACITOR,CHIP,2700PF 50V
C218, C408	15714700E	CAPACITOR,CHIP,47PF 50V
C219	157A2210E	CAPACITOR,CHIP,220PF 50V
C221	154C12424	CAPACITOR,FILM,0.12UF 50V
C222	154C33424	CAPACITOR,FILM,0.33UF 50V
C223, C237	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C224	154C56324	CAPACITOR,FILM,0.056UF 50V
C225	155633425	CAPACITOR,ELECTROLYTIC,0.33UF 50V
C227	157A6820E	CAPACITOR,CHIP,6800PF 50V
C228, C400	155633525	CAPACITOR,ELECTROLYTIC,3.3UF 50V
C229, C4B0	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C230	15718200E	CAPACITOR,CHIP,82PF 50V
C233, C234	155547525	CAPACITOR,ELECTROLYTIC,4.7UF 35V
C235, C242	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C238	155110725	CAPACITOR,ELECTROLYTIC,0
C239, C241	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C240	1552107G5	CAPACITOR,ELECTROLYTIC,100UF 10V
C243, C252	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C244, C246	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C245	157A4720E	CAPACITOR,CHIP,4700PF 50V
C247, C250	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C248, C603	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C249, C422	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
C251, C406	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C254	15783910E	CAPACITOR,CHIP,390PF 50V
C255, C409	15784710E	CAPACITOR,CHIP,470PF 50V
C256	1552227K6	CAPACITOR,ELECTROLYTIC,220UF 10V
C257	15781810E	CAPACITOR,CHIP,180PF 50V
C402, C403	157B1040E	CAPACITOR,CHIP,0.1UF 25V
C404	157F5620E	CAPACITOR,CHIP,5600PF 50V

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
C405, C715	157A2220E	CAPACITOR,CHIP,2200PF 50V
C407, C419	1553476G5	CAPACITOR,ELECTROLYTIC,47UF 16V
C410	15821050D	CAPACITOR,CHIP,TANTALUM,1UF 10V
C411	157A1520E	CAPACITOR,CHIP,1500PF 50V
C412, C460	157A1020E	CAPACITOR,CHIP,1000PF 50V
C413	153C47305	CAPACITOR,MYLAR,0.047UF 100V
C414, C415	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C416	155005325	CAPACITOR,ELECTROLYTIC,47UF 16V BP
C420, C424	157B1040E	CAPACITOR,CHIP,0.1UF 25V
C421	155310725	CAPACITOR,ELECTROLYTIC,100UF 16V
C425, C601	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C499	157B1040E	CAPACITOR,CHIP,0.1UF 25V
C4B1, CA02	1553107G5	CAPACITOR,ELECTROLYTIC,100UF 16V
C600, C602	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C606, CA14	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C607, C608	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C609, C610	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C700	155322625	CAPACITOR,ELECTROLYTIC,22UF 16V
C701, C702	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C703, C740	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C704, C706	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C705	157C2230E	CI-2125F223Z25-CT
C709, C726	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C713, C733	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C714, C743	1552107K5	CAPACITOR,ELECTROLYTIC,100UF 10V
C716, C718	155347625	CE-SSM47M16-FT
C717	15711510E	CAPACITOR,CHIP,150PF 50V
C719, C720	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
C721, C725	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
C722, C724	15711010E	CAPACITOR,CHIP,100PF 50V
C723, C828	155347625	CE-SSM47M16-FT
C728, C748	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C729, C730	15711000E	CAPACITOR,CHIP,10PF 50V
C731	15711300E	CAPACITOR,CHIP,13PF 50V
C732	15711000E	CAPACITOR,CHIP,10PF 50V
C735	15711800E	CAPACITOR,CHIP,18PF 50V
C736, C737	157A1020E	CAPACITOR,CHIP,1000PF 50V
C738, C739	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C741, C821	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C742, C747	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C744, C745	15713000E	CAPACITOR,CHIP,30P
C749	1552107K5	CAPACITOR,ELECTROLYTIC,100UF 10V
C752	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C753	157C1050E	CAPACITOR,CHIP,1UF 16V
C7B0	151147005	CAPACITOR,CERAMIC,47PF 50V
C800	150908900	CC-CFJC22E104M

PC BOARD ASS'Y (MAIN)**NOTE:** ▲: 2 HEAD 1 SCART WITH V.P.S. MODEL ONLY.

Ref. No.	Part No.	Description
C801	150909823	CC-CS15-E2GA472MYNS-FS
C803, C829	150910023	CC-CD85-B2GA221KYNS-FS
C804	15CK47620	CE-HPC47M400
C805, CA06	157A2230E	CAPACITOR,CHIP,0.022UF 25V
C806	157A2730E	CAPACITOR,CHIP,0.027UF 25V
C807	157A3320E	CAPACITOR,CHIP,3300PF 50V
C808	150908015	CC-SL560J1000-FT
C809	150907710	CC-B103K500
C810	157F8220E	CAPACITOR,CHIP,8200PF 50V
C811	150910723	CC-CD14-E2GA332MYNS-FS
C812	157A3330E	CAPACITOR,CHIP,0.033UF 25V
C813	1553107T5	CAPACITOR,ELECTROLYTIC,100UF 16V
C814	1552477J4	CAPACITOR,ELECTROLYTIC,470UF 10V
C815, CA00	1551108M5	CAPACITOR,ELECTROLYTIC,1000U 6.3V
C816, C819	1556226T5	CAPACITOR,ELECTROLYTIC,22UF 50V
C817, C830	1553277J5	CAPACITOR,ELECTROLYTIC,270UF 16V
C818, C820	1553477T5	CAPACITOR,ELECTROLYTIC,470UF 16V
C822, CA09	1553476G5	CAPACITOR,ELECTROLYTIC,47UF 16V
C823	155647425	CAPACITOR,ELECTROLYTIC,0.47UF 50V
C824	1507026J5	CAPACITOR,SUPER,DX-5R5L224-FT
C827, C832	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C831	1553477T5	CAPACITOR,ELECTROLYTIC,470UF 16V
CA01	155510625	CAPACITOR,ELECTROLYTIC,10UF 35V
CA04, CA05	157A1020E	CAPACITOR,CHIP,1000PF 50V
CA08, CH04	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
▲CE01	15781510E	CAPACITOR,CHIP,150PF 50V
▲CE02	157A3330E	CAPACITOR,CHIP,0.033UF 25V
▲CE03	157C1030E	CAPACITOR,CHIP,0.01UF 25V
▲CE04	157A3330E	CAPACITOR,CHIP,0.033UF 25V
▲CE05	157A2220E	CAPACITOR,CHIP,2200PF 50V
CH06, CH07	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CH08, CH15	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CH11	155347625	CE-SSM47M16-FT
CH21	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CH25	1553477M5	CAPACITOR,ELECTROLYTIC,470UF 16V
CH28	157A2220E	CAPACITOR,CHIP,2200PF 50V
CH32	157A2220E	CAPACITOR,CHIP,2200PF 50V
D400, D4B1	131002101	DIODE,1SS254T
D600	136400110	DI-HW300B-E,F
D700, D701	131002101	DIODE,1SS254T
D704, D805	131002101	DIODE,1SS254T
D707, D830	134014511	DIODE,ZENER,MTZJ5.6T-C
D800, D801	132016401	DIODE,D5GT
D802, D803	132016401	DIODE,D5GT
D806	132014606	DIODE,EG01C-FT
D811, D812	131002101	DIODE,1SS254T

PC BOARD ASS'Y (MAIN)**NOTE:** ▲: 2 HEAD 1 SCART WITH V.P.S. MODEL ONLY.

Ref. No.	Part No.	Description
D814	134015021	DIODE,ZENER,MTZJ6.2T-B
D815	134015131	DIODE,ZENER,MTZJ6.8T-B
D816, D835	13201630C	DIODE,SB130-C
D817, D819	131003001	DIODE,1SS244T
D818	132013508	DIODE,RU2YX-PF
D820	134019511	DIODE,ZENER,MTZJ33T-A,B
D821	132016708	DIODE,LT2A04-E
D822, D831	132016501	DIODE,D5GT
D824, D826	131002101	DIODE,1SS254T
D825	134016621	DIODE,ZENER,MTZJ11T-A
D829	134014611	DIODE,ZENER,MTZJ9.1T-C
D832, D838	132016501	DIODE,D5GT
D833, D834	198300101	JUMPER 5MM (INSERT)
D836, D837	131002101	DIODE,1SS254T
D899	132003203	DIODE,DAN202KT
DH13	134021921	DIODE,ZENER,MTZJ12T-A
ETA01	104307420	ELECTRONIC TUNER,TMLG1X103A
F200	1764167C0	X'TAL,HC-49U-4.43MHZ-T1
F700	1764161B0	X'TAL,HC-49U-16MHZ-T1
F701	176300500	X'TAL,32.768KHZ-10PPM
F702	1764166C0	X'TAL,HC-49U-17.734MHZ-T1
F703	1753081D0	CERAMIC FILTER,KBR-8.0M
FH801, FH802	26N20110	FUSE HOLDER CNT47
H700	143002200	FIP,SVV-7SS16
IC200	111768200	IC,TA1258N
IC201	111769200	IC,TL8850AP
IC400	111717300	IC,LA7286
IC600	111718200	IC,TA7291S
IC601	112293200	IC,TB6515AP
IC700	119425200	IC,TMP90CS74DF-6701(Z)
IC701	119384200	IC,TMP87CH70BF-6632
IC702	113113B03 (See the last page)	IC,AT24C04N-10SC-CT
IC703	111799D07	IC,XC61AN3202TH-RT
IC704	111658D07	IC,XC61AN4502TH-RT
IC800	145300900	PHOTOCOUPLER,PS2561-1-MDHW-V
IC801	111737A07	IC-KIA431AT-RT
▲ICE01	111765800	IC,SDA5649
ICH01	112283700	IC,CD4052BE
J600, J601	165100006	RESISTOR,CHIP,00HM 1/8W
J602, J603	165100006	RESISTOR,CHIP,00HM 1/8W
J604, J606	165100006	RESISTOR,CHIP,00HM 1/8W
J607, J608	165100006	RESISTOR,CHIP,00HM 1/8W
J609, J610	165100006	RESISTOR,CHIP,00HM 1/8W
J611, J613	165100006	RESISTOR,CHIP,00HM 1/8W
J614, J615	165100006	RESISTOR,CHIP,00HM 1/8W
J616, J618	165100006	RESISTOR,CHIP,00HM 1/8W

PC BOARD ASS'Y (MAIN)**NOTE:** ○: 2 HEAD 1 SCART SIMPLE MODEL ONLY, ▲: 2 HEAD 1 SCART WITH V.P.S. MODEL ONLY.

Ref. No.	Part No.	Description
J619, J620	165100006	RESISTOR,CHIP,00HM 1/8W
J624, J627	165100006	RESISTOR,CHIP,00HM 1/8W
J628, J635	165200006	RESISTOR,CHIP,00HM 1/10W
J631, J632	165100006	RESISTOR,CHIP,00HM 1/8W
J633, J649	165100006	RESISTOR,CHIP,00HM 1/8W
J637, J640	165200006	RESISTOR,CHIP,00HM 1/10W
J648, J652	165200006	RESISTOR,CHIP,00HM 1/10W
J650, J654	165100006	RESISTOR,CHIP,00HM 1/8W
J653, J7B0	165200006	RESISTOR,CHIP,00HM 1/10W
○J702	165210306	RESISTOR,CHIP,10KOHM 1/10W
J704, J705	165210306	RESISTOR,CHIP,10KOHM 1/10W
J707, R220	165210306	RESISTOR,CHIP,10KOHM 1/10W
J800, JA00	165200006	RESISTOR,CHIP,00HM 1/10W
JA02,	165200006	RESISTOR,CHIP,00HM 1/10W
▲JH00	165200006	RESISTOR,CHIP,00HM 1/10W
L201	172025334	COIL,EL0305RA-151J-FT
L202	172019327	COIL,LF-5.0-270J-ST
L203	172024834	COIL,EL0305RA-220J-FT
L204, L205	172025234	COIL,EL0305RA-101J-FT
L206, L401	172025234	COIL,EL0305RA-101J-FT
L207, L208	1720077C4	COIL,FLR50T50-101J-FT
L400	171055600	COIL,OSC-BIAS (11V)
L702	172012227	L-LF-5.0-470J-ST
L800	173006730	COIL,HF2022-183Y0R5-01
L801, L802	172023534	COIL,ELC0607RA-220K-FT
L803, L804	172023534	COIL,ELC0607RA-220K-FT
LA02	172024634	COIL,EL0305RA-100J-FT
LA03	172024734	COIL,EL0305RA-150J-FT
▲LE01	172025234	COIL,EL0305RA-101J-FT
MD700	106012600	MODULE,PIC-21143LJ
MP300	22129070	HOLDER (LED)
MP301, MP302	22129080	HOLDER (SENSOR)
MP303	22129090	HOLDER (HALL-SENSOR)
MP304, MP305	22129100	HOLDER (SENSOR-CAP)
MP306	22128890	HOLDER (FIP-L-S2)
MP307	22128910	HOLDER (FIP-R-S2)
MP308, MP309	21144810	HEATSINK
MP310, MP311	2953308A	DPBB-3X8SSA
MP399	25351060	CUSHION
MS600	100008500	MS-STATOR,ASSY
N201	26031000	GROUND CORD ##
N203	191240580	WIRE
N600	196312390	QS-CONN-IL02 ##
P200	1981334GA	POST-00-6232-010-006-8
P400	1981335G7	POST-006216-007-000808
P401	1981340A2	POST-TMC-A02X-A1

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
P700	1981322AA	POST-TKC-G10P-A1
P701, P703	1981270G2	POST-00-8283-0212-0
P800	198130722	POST-B2P3-VH
PD700	145200100	PHOTODIODE, GL451V
PH00	26563170	CONN
PI700, PI701	145400300	PHOTOINTERRUPTER, GP1S566
PQ700, PQ701	145100100	PHOTOTRANSISTOR, PT493F
Q200, Q205	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q203, Q207	121126711	TRANSISTOR, 2SA1267T-GR
Q204, QH02	120004601	TRANSISTOR, RN1203, TPE4
Q208, Q209	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q210, Q214	121126711	TRANSISTOR, 2SA1267T-GR
Q211, Q213	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q400	123195901	TRANSISTOR, 2SC1959T-GR
Q4B1, Q805	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q701	121126711	TRANSISTOR, 2SA1267T-GR
Q800	123451700	TRANSISTOR, 2SC4517
Q801	124213201	TRANSISTOR, 2SD2132T-V, W
Q803, Q804	124239600	TRANSISTOR, 2SD2396-J, K
Q806	124185811	TRANSISTOR, 2SD1858T-Q, R
Q807	121102031	TRANSISTOR, 2SA1020T-O, Y
Q808	120010501	TRANSISTOR, KRC102MT
QA01	120003603	TRANSISTOR, DTC114TKT
QH03	120003201	TRANSISTOR, RN2205ST
R200	165222506	RESISTOR, CHIP, 2.2MOHM 1/10W
R201	165251206	RESISTOR, CHIP, 5.1KOHM 1/10W
R202, R207	165210206	RESISTOR, CHIP, 1KOHM 1/10W
R203, R233	165210106	RESISTOR, CHIP, 100OHM 1/10W
R204, R211	165268106	RESISTOR, CHIP, 680OHM 1/10W
R205, R212	165215206	RESISTOR, CHIP, 1.5KOHM 1/10W
R208	161C22108	RESISTOR, CARBON, 220OHM 1/2W
R210, R228	165222206	RESISTOR, CHIP, 2.2KOHM 1/10W
R213	165227106	RESISTOR, CHIP, 270OHM 1/10W
R214, R216	165282106	RESISTOR, CHIP, 820OHM 1/10W
R215	165233306	RESISTOR, CHIP, 33KOHM 1/10W
R217, R222	165233106	RESISTOR, CHIP, 330OHM 1/10W
R218, R727	165247306	RESISTOR, CHIP, 47KOHM 1/10W
R219, R221	165210506	RESISTOR, CHIP, 1MOHM 1/10W
R223, R236	165215206	RESISTOR, CHIP, 1.5KOHM 1/10W
R224, R891	165233106	RESISTOR, CHIP, 330OHM 1/10W
R226, R745	165222306	RESISTOR, CHIP, 22KOHM 1/10W
R227, R404	165212306	RESISTOR, CHIP, 12KOHM 1/10W
R229, R239	165282106	RESISTOR, CHIP, 820OHM 1/10W
R230, R238	165222206	RESISTOR, CHIP, 2.2KOHM 1/10W
R231, RA03	165212206	RESISTOR, CHIP, 1.2KOHM 1/10W
R232, R423	165233206	RESISTOR, CHIP, 3.3KOHM 1/10W

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
R234, R241	165210306	RESISTOR,CHIP,10KOHM 1/10W
R235, R703	165218306	RESISTOR,CHIP,18KOHM 1/10W
R237, R460	165215206	RESISTOR,CHIP,1.5KOHM 1/10W
R246, R418	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R400	165282206	RESISTOR,CHIP,8.2KOHM 1/10W
R401, R707	165210406	RESISTOR,CHIP,100KOHM 1/10W
R402, R405	165210206	RESISTOR,CHIP,1KOHM 1/10W
R403, R728	165256206	RESISTOR,CHIP,5.6KOHM 1/10W
R406	165233406	RESISTOR,CHIP,330KOHM 1/10W
R407, R412	165218106	RESISTOR,CHIP,180OHM 1/10W
R409, R765	165210106	RESISTOR,CHIP,100OHM 1/10W
R410	165215406	RESISTOR,CHIP,150KOHM 1/10W
R411, R746	165227306	RESISTOR,CHIP,27KOHM 1/10W
R413, R417	165247006	RESISTOR,CHIP,47OHM 1/10W
R414, R747	165212306	RESISTOR,CHIP,12KOHM 1/10W
R415	16524R706	RESISTOR,CHIP,4.7OHM 1/10W
R416, R4A1	165200006	RESISTOR,CHIP,0OHM 1/10W
R419, R421	165227206	RESISTOR,CHIP,2.7KOHM 1/10W
R420, R422	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R424, R812	165239206	RESISTOR,CHIP,3.9KOHM 1/10W
R4B0, R729	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R600, R601	165210306	RESISTOR,CHIP,10KOHM 1/10W
R602, R603	16521R006	RESISTOR,CHIP,1OHM 1/10W
R604	16521R006	RESISTOR,CHIP,1OHM 1/10W
R605	16131R004	RESISTOR,CARBON,1OHM 1/6W
R606, R819	165222106	RESISTOR,CHIP,220OHM 1/10W
R700, R701	165210306	RESISTOR,CHIP,10KOHM 1/10W
R702, R840	165215306	RESISTOR,CHIP,15KOHM 1/10W
R706	165239306	RESISTOR,CHIP,39KOHM 1/10W
R708, R709	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R710, R711	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R712, R713	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R714, R821	165282106	RESISTOR,CHIP,820OHM 1/10W
R715	165268406	RESISTOR,CHIP,680KOHM 1/10W
R716	165222406	RESISTOR,CHIP,220KOHM 1/10W
R717, R816	165247106	RESISTOR,CHIP,470OHM 1/10W
R718, R719	165247406	RESISTOR,CHIP,470KOHM 1/10W
R720, R723	165256306	RESISTOR,CHIP,56KOHM 1/10W
R721, R724	165218206	RESISTOR,CHIP,1.8KOHM 1/10W
R722, R731	165210206	RESISTOR,CHIP,1KOHM 1/10W
R725, R726	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R730, R733	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R732, R758	165210306	RESISTOR,CHIP,10KOHM 1/10W
R734	165218206	RESISTOR,CHIP,1.8KOHM 1/10W
R735, R736	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R737, R738	165247206	RESISTOR,CHIP,4.7KOHM 1/10W

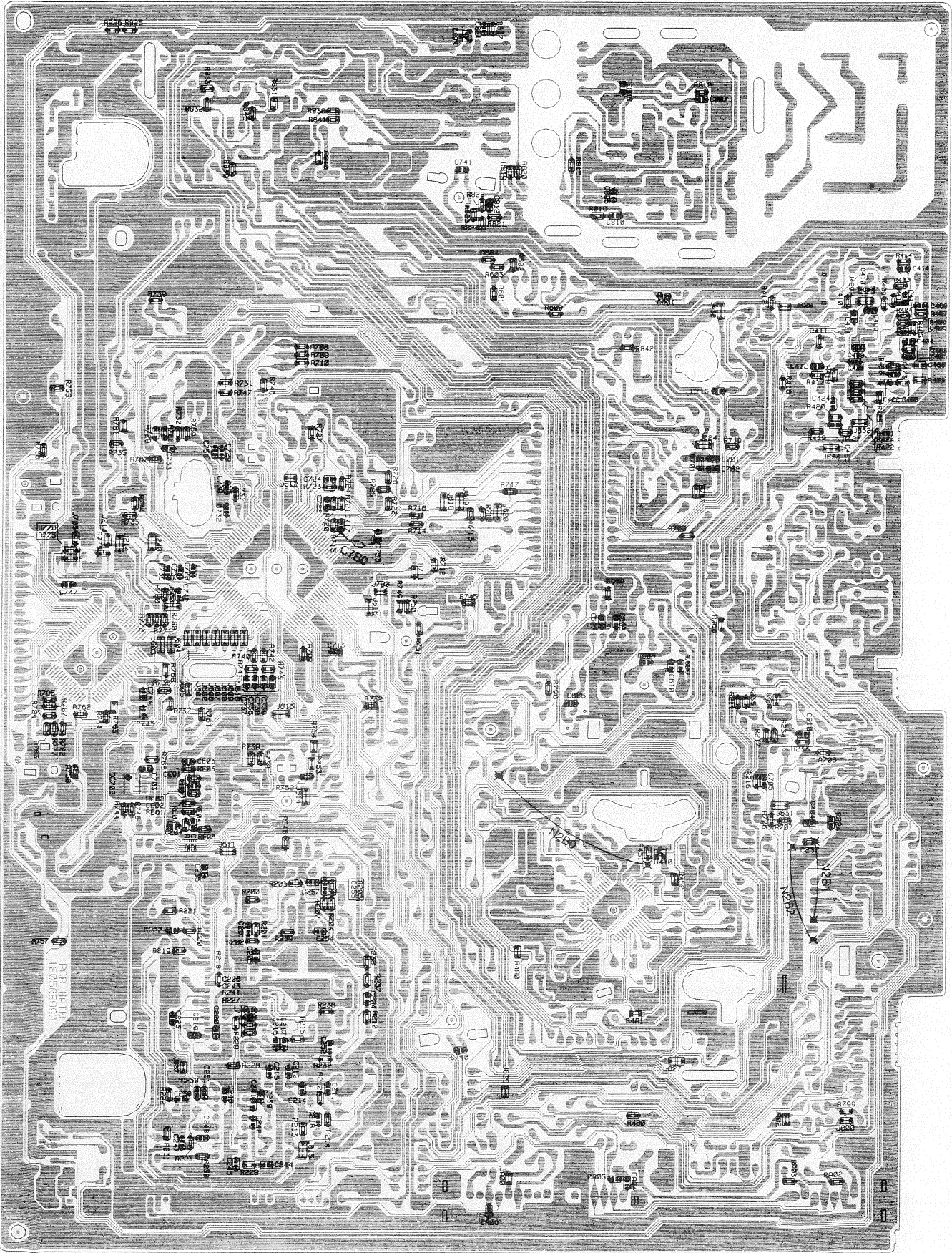
PC BOARD ASS'Y (MAIN)**NOTE:** ○: 2 HEAD 1 SCART SIMPLE MODEL ONLY, ▲: 2 HEAD 1 SCART WITH V.P.S. MODEL ONLY.

Ref. No.	Part No.	Description
R739, R744	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R740, R741	165247306	RESISTOR,CHIP,47KOHM 1/10W
R742, R743	165210406	RESISTOR,CHIP,100KOHM 1/10W
R748	165212306	RESISTOR,CHIP,12KOHM 1/10W
R749, R753	165200006	RESISTOR,CHIP,0OHM 1/10W
R750, R751	165275006	RESISTOR,CHIP,75OHM 1/10W
R752, R824	165215106	RESISTOR,CHIP,150OHM 1/10W
R754, R760	165200006	RESISTOR,CHIP,0OHM 1/10W
R755	165220306	RESISTOR,CHIP,20.0KOHM 1/10W
R756, RE05	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
R757	165233206	RESISTOR,CHIP,3.3KOHM 1/10W
R759, R764	165247306	RESISTOR,CHIP,47KOHM 1/10W
R761, R767	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R762, R770	165210306	RESISTOR,CHIP,10KOHM 1/10W
R763, R781	165200006	RESISTOR,CHIP,0OHM 1/10W
R768, R827	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R769, R820	165210206	RESISTOR,CHIP,1KOHM 1/10W
▲R771	165210306	RESISTOR,CHIP,10KOHM 1/10W
R772	165210306	RESISTOR,CHIP,10KOHM 1/10W
R775, R780	165210306	RESISTOR,CHIP,10KOHM 1/10W
R782, R783	165210306	RESISTOR,CHIP,10KOHM 1/10W
R784, R785	165210306	RESISTOR,CHIP,10KOHM 1/10W
R788, R798	165210306	RESISTOR,CHIP,10KOHM 1/10W
R799, RH02	165200006	RESISTOR,CHIP,0OHM 1/10W
○ R7A0	165210306	RESISTOR,CHIP,10KOHM 1/10W
R800	16C34R71A	RESISTOR4.7OHM 3W
R801, R802	161382304	RESISTOR,CARBON,82KOHM 1/6W
R803, R804	161382304	RESISTOR,CARBON,82KOHM 1/6W
R805, R806	161368304	RESISTOR,CARBON,68KOHM 1/6W
R807, R808	161368304	RESISTOR,CARBON,68KOHM 1/6W
R811	16411210A	RESISTOR,OXIDE METAL FILM,120OHM 1W
R813	16311R20A	RESISTOR,METAL FILM,1.2OHM 1/2W
R814	16D38231A	RESISTOR82KOHM 3W
R815	165227206	RESISTOR,CHIP,2.7KOHM 1/10W
R822	165C30206	RESISTOR,CHIP,2KOHM 1/10W
R823	165C20206	RESISTOR,CHIP,2KOHM 1/10W
R825, R826	165247006	RESISTOR,CHIP,47OHM 1/10W
R830	165218306	RESISTOR,CHIP,18KOHM 1/10W
R831, R842	165210306	RESISTOR,CHIP,10KOHM 1/10W
R832	165239206	RESISTOR,CHIP,3.9KOHM 1/10W
R833	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R839, R894	165247106	RESISTOR,CHIP,470OHM 1/10W
R841, R845	165210206	RESISTOR,CHIP,1KOHM 1/10W
R843, R844	161322204	RESISTOR,CARBON,2.2KOHM 1/6W
R892	165233106	RESISTOR,CHIP,330OHM 1/10W
R895, R896	165247106	RESISTOR,CHIP,470OHM 1/10W

PC BOARD ASS'Y (MAIN)**NOTE:** ▲ : 2 HEAD 1 SCART WITH V.P.S. MODEL ONLY.

Ref. No.	Part No.	Description
R897	161322104	RESISTOR,CARBON,220OHM 1/6W
R898	164127102	RESISTOR,OXIDE METAL FILM,270OHM 1W
R899	16132R204	RESISTOR,CARBON,2.2OHM 1/6W
RA02, RH12	165210206	RESISTOR,CHIP,1KOHM 1/10W
▲ RE01	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
▲ RE02	165210406	RESISTOR,CHIP,100KOHM 1/10W
▲ RE03	165210506	RESISTOR,CHIP,1MOHM 1/10W
▲ RE04	165212506	RESISTOR,CHIP,1200KOHM 1/10W
▲ RE05	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
▲ RE06	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
▲ RE07	165212506	RESISTOR,CHIP,1200KOHM 1/10W
RH01	16133R304	RESISTOR,CARBON,3.3OHM 1/6W
RH03	165210406	RESISTOR,CHIP,100KOHM 1/10W
RH04	165227306	RESISTOR,CHIP,27KOHM 1/10W
RH05	165256206	RESISTOR,CHIP,5.6KOHM 1/10W
RH06	161312204	RESISTOR,CARBON,1.2KOHM 1/6W
RH16, RH17	165275006	RESISTOR,CHIP,75OHM 1/10W
RH33	165247306	RESISTOR,CHIP,47KOHM 1/10W
RH40	165222106	RESISTOR,CHIP,220OHM 1/10W
SW700	23H10150	SWITCH MMS00370ZMB0
SW702, SW703	23A11620	SWITCH SKHVBH-RT
SW704, SW710	23A11620	SWITCH SKHVBH-RT
SW709	23A11630	SWITCH MPU10252MLB1
T800	174401630	TRANSFORMER,SWT-SRW2929ED641V0
Z800	26GA022	MINI FUSE T1.6A250V
	28004530	INSULATOR (I.C.) FOR IC700

PC BOARD ASS'Y (MAIN)



11. PC BOARD ASS'Y (MAIN) PARTS LIST FOR MONAURAL 2 SCART MODEL

PC BOARD ASSY (MAIN)

NOTE: ◇ :FOR 2 HEAD WITH S.V. MODEL ONLY ◎: FOR 2 HEAD FULL MODEL ONLY. △: FOR 4 HEAD FULL MODEL ONLY.

Ref. No.	Part No.	Description
C200, C231	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
C201	15712210E	CAPACITOR,CHIP,220PF 50V
C202, C226	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C204, C210	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C205, C220	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C206, C236	1552107G5	CAPACITOR,ELECTROLYTIC,100UF 10V
C207, C426	155322625	CAPACITOR,ELECTROLYTIC,22UF 16V
C209	157A1830E	CAPACITOR,CHIP,0.018UF 25V
C211, C214	15711200E	CAPACITOR,CHIP,12PF 50V
C212, C734	15711800E	CAPACITOR,CHIP,18PF 50V
C213	15788210E	CAPACITOR,CHIP,820PF 50V
C215	15711500E	CAPACITOR,CHIP,15PF 50V
C216, C417	155647425	CAPACITOR,ELECTROLYTIC,0.47UF 50V
C217	157F2720E	CAPACITOR,CHIP,2700PF 50V
C218, C408	15714700E	CAPACITOR,CHIP,47PF 50V
C219	157A2210E	CAPACITOR,CHIP,220PF 50V
C221	154C12424	CAPACITOR,FILM,0.12UF 50V
C222	154C33424	CAPACITOR,FILM,0.33UF 50V
C223, C244	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C224	154C56324	CAPACITOR,FILM,0.056UF 50V
C225	155633425	CAPACITOR,ELECTROLYTIC,0.33UF 50V
C227	157A6820E	CAPACITOR,CHIP,6800PF 50V
C228, C400	155633525	CAPACITOR,ELECTROLYTIC,3.3UF 50V
C229, C4B0	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C230	15718200E	CAPACITOR,CHIP,82PF 50V
C233, C234	155547525	CAPACITOR,ELECTROLYTIC,4.7UF 35V
C235, C242	157A1040E	CAPACITOR,CHIP,0.1UF 25V
◇ ◎ C237	157A1030E	CAPACITOR,CHIP,0.01UF 25V
△ C237	165233106	RESISTOR,CHIP,330OHM 1/10W
C238	155110725	CAPACITOR,ELECTROLYTIC,0
C239, C241	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C240	1552107G5	CAPACITOR,ELECTROLYTIC,100UF 10V
C243, C252	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C245	157A4720E	CAPACITOR,CHIP,4700PF 50V
C246, C247	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C248, C603	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C249, C422	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
C250, C251	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C254	15783910E	CAPACITOR,CHIP,390PF 50V
C255, C409	15784710E	CAPACITOR,CHIP,470PF 50V
C256	1552227K6	CAPACITOR,ELECTROLYTIC,220UF 10V
C257	15781810E	CAPACITOR,CHIP,180PF 50V
C402, C403	157B1040E	CAPACITOR,CHIP,0.1UF 25V

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
C404	157F5620E	CAPACITOR,CHIP,5600PF 50V
C405, C715	157A2220E	CAPACITOR,CHIP,2200PF 50V
C406, C414	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C407, C419	1553476G5	CAPACITOR,ELECTROLYTIC,47UF 16V
C410	15821050D	CAPACITOR,CHIP,TANTALUM,1UF 10V
C411	157A1520E	CAPACITOR,CHIP,1500PF 50V
C412, C460	157A1020E	CAPACITOR,CHIP,1000PF 50V
C413	153C47305	CAPACITOR,MYLAR,0.047UF 100V
C415, C425	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C416	155005325	CAPACITOR,ELECTROLYTIC,47UF 16V BP
C420, C424	157B1040E	CAPACITOR,CHIP,0.1UF 25V
C421	155310725	CAPACITOR,ELECTROLYTIC,100UF 16V
C438, J213	165200006	RESISTOR,CHIP,0OHM 1/10W
C439	155322625	CAPACITOR,ELECTROLYTIC,22UF 16V
C499	157B1040E	CAPACITOR,CHIP,0.1UF 25V
C4B1, CA02	1553107G5	CAPACITOR,ELECTROLYTIC,100UF 16V
C600, C602	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C601, C607	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C606	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C608, C609	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C610, C701	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C700	155322625	CAPACITOR,ELECTROLYTIC,22UF 16V
C702, C704	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C703, C740	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C705	157C2230E	CI-2125F223Z25-CT
C706, C713	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C709, C726	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C714, C743	1552107K5	CAPACITOR,ELECTROLYTIC,100UF 10V
C716, C718	155347625	CE-SSM47M16-FT
C717	15711510E	CAPACITOR,CHIP,150PF 50V
C719, C720	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
C721, C725	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
C722, C724	15711010E	CAPACITOR,CHIP,100PF 50V
C723, C828	155347625	CE-SSM47M16-FT
C728, C748	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C729, C730	15711000E	CAPACITOR,CHIP,10PF 50V
C731	15711300E	CAPACITOR,CHIP,13PF 50V
C732	15711000E	CAPACITOR,CHIP,10PF 50V
C733, C738	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C735	15711800E	CAPACITOR,CHIP,18PF 50V
C736, C737	157A1020E	CAPACITOR,CHIP,1000PF 50V
C739, C742	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C741, C821	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C744, C745	15713000E	CAPACITOR,CHIP,30P
C747, C752	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C749	1552107K5	CAPACITOR,ELECTROLYTIC,100UF 10V

PC BOARD ASS'Y (MAIN)**NOTE:** ◎: FOR 2 HEAD FULL MODEL ONLY. △: FOR 4 HEAD FULL MODEL ONLY.

Ref. No.	Part No.	Description
C753	157C1050E	CAPACITOR,CHIP,1UF 16V
C7B0	151147005	CAPACITOR,CERAMIC,47PF 50V
C800	150908900	CC-CFJC22E104M
C801	150909823	CC-CS15-E2GA472MYNS-FS
C803, C829	150910023	CC-CD85-B2GA221KYNS-FS
C804	15CK47620	CE-HPC47M400
C805, CA06	157A2230E	CAPACITOR,CHIP,0.022UF 25V
C806	157A2730E	CAPACITOR,CHIP,0.027UF 25V
C807	157A3320E	CAPACITOR,CHIP,3300PF 50V
C808	150908015	CC-SL560J1000-FT
C809	150907710	CC-B103K500
C810	157F8220E	CAPACITOR,CHIP,8200PF 50V
C811	150910723	CC-CD14-E2GA332MYNS-FS
C812, CE02	157A3330E	CAPACITOR,CHIP,0.033UF 25V
C813	1553107T5	CAPACITOR,ELECTROLYTIC,100UF 16V
C814	1552477J4	CAPACITOR,ELECTROLYTIC,470UF 10V
C815, CA00	1551108M5	CAPACITOR,ELECTROLYTIC,1000U 6.3V
C816, C819	1556226T5	CAPACITOR,ELECTROLYTIC,22UF 50V
C817, C830	1553277J5	CAPACITOR,ELECTROLYTIC,270UF 16V
C818, C820	1553477T5	CAPACITOR,ELECTROLYTIC,470UF 16V
C822, CA09	1553476G5	CAPACITOR,ELECTROLYTIC,47UF 16V
C823	155647425	CAPACITOR,ELECTROLYTIC,0.47UF 50V
C824	1507026J5	CAPACITOR,SUPER,DX-5R5L224-FT
C827, C832	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C831	1553477T5	CAPACITOR,ELECTROLYTIC,470UF 16V
CA01	155510625	CAPACITOR,ELECTROLYTIC,10UF 35V
CA04, CA05	157A1020E	CAPACITOR,CHIP,1000PF 50V
CA08	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
△ ◎ CE01	15781510E	CAPACITOR,CHIP,150PF 50V
△ ◎ CE02	157A3330E	CAPACITOR,CHIP,0.033UF 25V
△ ◎ CE03	157C1030E	CAPACITOR,CHIP,0.01UF 25V
△ ◎ CE04	157A3330E	CAPACITOR,CHIP,0.033UF 25V
△ ◎ CE05	157A2220E	CAPACITOR,CHIP,2200PF 50V
D400, D4B1	131002101	DIODE,1SS254T
D600	136400110	DI-HW300B-E,F
D700, D701	131002101	DIODE,1SS254T
D704, D706	131002101	DIODE,1SS254T
D707, D830	134014511	DIODE,ZENER,MTZJ5.6T-C
D800, D801	132016401	DIODE,D5GT
D802, D803	132016401	DIODE,D5GT
D805, D811	131002101	DIODE,1SS254T
D806	132014606	DIODE,EG01C-FT
D812, D824	131002101	DIODE,1SS254T
D814	134015021	DIODE,ZENER,MTZJ6.2T-B
D815	134015131	DIODE,ZENER,MTZJ6.8T-B
D816, D835	13201630C	DIODE,SB130-C

PC BOARD ASS'Y (MAIN)**NOTE:** ◎: FOR 2 HEAD FULL MODEL ONLY. △: FOR 4 HEAD FULL MODEL ONLY.

Ref. No.	Part No.	Description
D817, D819	131003001	DIODE,1SS244T
D818	132013508	DIODE,RU2YX-PF
D820	134019511	DIODE,ZENER,MTZJ33T-A,B
D821	132016708	DIODE,LT2A04-E
D822, D831	132016501	DIODE,D5GT
D825	134016621	DIODE,ZENER,MTZJ11T-A
D826, D833	131002101	DIODE,1SS254T
D829	134014611	DIODE,ZENER,MTZJ9.1T-C
D832, D838	132016501	DIODE,D5GT
D834, D836	131002101	DIODE,1SS254T
D837	131002101	DIODE,1SS254T
D899	132003203	DIODE,DAN202KT
ETA01	104307420	ELECTRONIC TUNER,TMLG1X103A
F200	1764167C0	X'TAL,HC-49U-4.43MHZ-T1
F700	1764161B0	X'TAL,HC-49U-16MHZ-T1
F701	176300500	X'TAL,32.768KHZ-10PPM
F702	1764166C0	X'TAL,HC-49U-17.734MHZ-T1
F703	1753081D0	CERAMIC FILTER,KBR-8.0M
FH801, FH802	26N20110	FUSE HOLDER CNT47
H700	143002200	FIP,SVV-7SS16
IC200	111768200	IC,TA1258N
IC201	111769200	IC,TL8850AP
IC400	111717300	IC,LA7286
IC600	111718200	IC,TA7291S
IC601	112293200	IC,TB6515AP
IC700	119425200	IC,TMP90CS74DF-6701(Z)
IC701	119384200	IC,TMP87CH70BF-6632
IC702	113113B03 (See the last page)	IC,AT24C04N-10SC-CT
IC703	111799D07	IC,XC61AN3202TH-RT
IC704	111658D07	IC,XC61AN4502TH-RT
IC800	145300900	PHOTOCOUPLER,PS2561-1-MDHW-V
IC801	111737A07	IC-KIA431AT-RT
△ ◎ ICE01	111765800	IC,SDA5649
J214, J240	165100006	RESISTOR,CHIP,00HM 1/8W
J432, J489	165100006	RESISTOR,CHIP,00HM 1/8W
△ J442	155122620	CE-SSM22 M6.3
J600, J601	165100006	RESISTOR,CHIP,00HM 1/8W
J602, J603	165100006	RESISTOR,CHIP,00HM 1/8W
J604, J606	165100006	RESISTOR,CHIP,00HM 1/8W
J605, J612	165200006	RESISTOR,CHIP,00HM 1/10W
J607, J608	165100006	RESISTOR,CHIP,00HM 1/8W
J609, J610	165100006	RESISTOR,CHIP,00HM 1/8W
J611, J613	165100006	RESISTOR,CHIP,00HM 1/8W
J614, J615	165100006	RESISTOR,CHIP,00HM 1/8W
J616, J618	165100006	RESISTOR,CHIP,00HM 1/8W
J619, J620	165100006	RESISTOR,CHIP,00HM 1/8W

PC BOARD ASS'Y (MAIN)

NOTE: ◇ :FOR 2 HEAD WITH S.V. MODEL ONLY ◎ : FOR 2 HEAD FULL MODEL ONLY. △: FOR 4 HEAD FULL MODEL ONLY.

Ref. No.	Part No.	Description
J624, J627	165100006	RESISTOR,CHIP,00HM 1/8W
J628, J635	165200006	RESISTOR,CHIP,00HM 1/10W
△ J629	165210306	RESISTOR,CHIP,10KOHM 1/10W
J631, J632	165100006	RESISTOR,CHIP,00HM 1/8W
J633, J643	165100006	RESISTOR,CHIP,00HM 1/8W
J637, J640	165200006	RESISTOR,CHIP,00HM 1/10W
J644, J645	165200006	RESISTOR,CHIP,00HM 1/10W
J647, J655	165200006	RESISTOR,CHIP,00HM 1/10W
◇ J702	165210306	RESISTOR,CHIP,10KOHM 1/10W
J705, R220	165210306	RESISTOR,CHIP,10KOHM 1/10W
◇ ◎ J707	165210306	RESISTOR,CHIP,10KOHM 1/10W
J7B0, J800	165200006	RESISTOR,CHIP,00HM 1/10W
JA00, JA02	165200006	RESISTOR,CHIP,00HM 1/10W
L201	172025334	COIL,EL0305RA-151J-FT
L202	172019327	COIL,LF-5.0-270J-ST
L203	172024834	COIL,EL0305RA-220J-FT
L204, L205	172025234	COIL,EL0305RA-101J-FT
L206, L401	172025234	COIL,EL0305RA-101J-FT
L207, L208	1720077C4	COIL,FLR50T50-101J-FT
L400	171055600	COIL,OSC-BIAS (11V)
L702	172012227	L-LF-5.0-470J-ST
L800	173006730	COIL,HF2022-183Y0R5-01
L801, L802	172023534	COIL,ELC0607RA-220K-FT
L803, L804	172023534	COIL,ELC0607RA-220K-FT
LA02	172024634	COIL,EL0305RA-100J-FT
LA03	172024734	COIL,EL0305RA-150J-FT
△ ◎ LE01	172025234	COIL,EL0305RA-101J-FT
MD700	106012600	MODULE,PIC-21143LJ
MP300	22129070	HOLDER (LED)
MP301, MP302	22129080	HOLDER (SENSOR)
MP303	22129090	HOLDER (HALL-SENSOR)
MP304, MP305	22129100	HOLDER (SENSOR-CAP)
MP306	22128890	HOLDER (FIP-L-S2)
MP307	22128910	HOLDER (FIP-R-S2)
MP308, MP309	21144810	HEATSINK
MP310, MP311	2953308A	DPBB-3X8SSA
MP399	25351060	CUSHION
MS600	100008500	MS-STATOR,ASSY
N201	26031000	GROUND CORD ##
N203	191240580	WIRE ON MOUNTED SIDE
N600	196312390	QS-CONN-IL02 ##
△ N2B0	191105510	WIRE ##
△ N2B1	191103510	WIRE
△ N2B2	191103510	WIRE
△ N2B3	191104450	WIRE
△ N2B4	191206650	WIRE ##

ADDITION ON FOIL SIDE

ADDITION ON MOUNTED SIDE

PC BOARD ASS'Y (MAIN)**NOTE:** △: FOR 4 HEAD FULL MODEL ONLY.

Ref. No.	Part No.	Description
P200	1981334GA	POST-00-6232-010-006-8
P400	1981335G7	POST-006216-007-000808
P401	1981340A2	POST-TMC-A02X-A1
P403	1981333DF	POST-9115B-15
P404	1981333D3	POST-9115B-03
P700	1981322AA	POST-TKC-G10P-A1
P701, P703	1981270G2	POST-00-8283-0212-0
P800	198130722	POST-B2P3-VH
PD700	145200100	PHOTODIODE, GL451V
PI700, PI701	145400300	PHOTOINTERRUPTER, GP1S566
PQ700, PQ701	145100100	PHOTOTRANSISTOR, PT493F
Q200, Q205	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q203, Q207	121126711	TRANSISTOR, 2SA1267T-GR
Q204	120004601	TRANSISTOR, RN1203, TPE4
Q208, Q209	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q210, Q214	121126711	TRANSISTOR, 2SA1267T-GR
Q211, Q213	123319911	TRANSISTOR, 2SC3199T-Y, GR
△ Q2B0	120002601	TRANSISTOR, DTC114TST
Q400	123195901	TRANSISTOR, 2SC1959T-GR
△ Q410	12110372B	TRANSISTOR, 2SA1037AKT146-Q, R
Q4B1, Q805	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q701	121126711	TRANSISTOR, 2SA1267T-GR
Q702	120002601	TRANSISTOR, DTC114TST
Q703	120003603	TRANSISTOR, DTC114TKT
Q800	123451700	TRANSISTOR, 2SC4517
Q801	124213201	TRANSISTOR, 2SD2132T-V, W
Q803, Q804	124239600	TRANSISTOR, 2SD2396-J, K
Q806	124185811	TRANSISTOR, 2SD1858T-Q, R
Q807	121102031	TRANSISTOR, 2SA1020T-O, Y
Q808	120010501	TRANSISTOR, KRC102MT
R200	165222506	RESISTOR, CHIP, 2.2MOHM 1/10W
R201	165251206	RESISTOR, CHIP, 5.1KOHM 1/10W
R202, R207	165210206	RESISTOR, CHIP, 1KOHM 1/10W
R203, R233	165210106	RESISTOR, CHIP, 100OHM 1/10W
R204, R211	165268106	RESISTOR, CHIP, 680OHM 1/10W
R205, R212	165215206	RESISTOR, CHIP, 1.5KOHM 1/10W
R208	161C22108	RESISTOR, CARBON, 220OHM 1/2W
R210, R228	165222206	RESISTOR, CHIP, 2.2KOHM 1/10W
R213	165227106	RESISTOR, CHIP, 270OHM 1/10W
R214, R216	165282106	RESISTOR, CHIP, 820OHM 1/10W
R215, R777	165233306	RESISTOR, CHIP, 33KOHM 1/10W
R217	165233106	RESISTOR, CHIP, 330OHM 1/10W
R218, R727	165247306	RESISTOR, CHIP, 47KOHM 1/10W
R219, R221	165210506	RESISTOR, CHIP, 1MOHM 1/10W
R222, R891	165233106	RESISTOR, CHIP, 330OHM 1/10W
R223, R236	165215206	RESISTOR, CHIP, 1.5KOHM 1/10W

PC BOARD ASS'Y (MAIN)

NOTE: ◇ :FOR 2 HEAD WITH S.V. MODEL ONLY ◎: FOR 2 HEAD FULL MODEL ONLY. △: FOR 4 HEAD FULL MODEL ONLY.

Ref. No.	Part No.	Description
◇ ◎ R224	165233106	RESISTOR,CHIP,330OHM 1/10W
△ R224	157A1030E	CAPACITOR,CHIP,0.01UF 25V
R226, R745	165222306	RESISTOR,CHIP,22KOHM 1/10W
R227, R404	165212306	RESISTOR,CHIP,12KOHM 1/10W
R229, R239	165282106	RESISTOR,CHIP,820OHM 1/10W
R230, R238	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R231, RA03	165212206	RESISTOR,CHIP,1.2KOHM 1/10W
R232, R423	165233206	RESISTOR,CHIP,3.3KOHM 1/10W
R234, R241	165210306	RESISTOR,CHIP,10KOHM 1/10W
R235, R703	165218306	RESISTOR,CHIP,18KOHM 1/10W
R237, R460	165215206	RESISTOR,CHIP,1.5KOHM 1/10W
R246, R418	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R247, R600	165210306	RESISTOR,CHIP,10KOHM 1/10W
R400	165282206	RESISTOR,CHIP,8.2KOHM 1/10W
R401, R707	165210406	RESISTOR,CHIP,100KOHM 1/10W
R402, R405	165210206	RESISTOR,CHIP,1KOHM 1/10W
R403, R728	165256206	RESISTOR,CHIP,5.6KOHM 1/10W
R406	165233406	RESISTOR,CHIP,330KOHM 1/10W
R407, R752	165215106	RESISTOR,CHIP,150OHM 1/10W
R409, R765	165210106	RESISTOR,CHIP,100OHM 1/10W
R410	165215406	RESISTOR,CHIP,150KOHM 1/10W
R411, R746	165227306	RESISTOR,CHIP,27KOHM 1/10W
R412	165218106	RESISTOR,CHIP,180OHM 1/10W
R413, R417	165247006	RESISTOR,CHIP,47OHM 1/10W
R414, R747	165212306	RESISTOR,CHIP,12KOHM 1/10W
R415	16524R706	RESISTOR,CHIP,4.7OHM 1/10W
R416, R4A0	165200006	RESISTOR,CHIP,0OHM 1/10W
R419, R721	165218206	RESISTOR,CHIP,1.8KOHM 1/10W
R420, R422	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R421, R815	165227206	RESISTOR,CHIP,2.7KOHM 1/10W
R424, R812	165239206	RESISTOR,CHIP,3.9KOHM 1/10W
△ R451	165247406	RESISTOR,CHIP,470KOHM 1/10W
△ R452	165200006	RESISTOR,CHIP,0OHM 1/10W
R4A1, R749	165200006	RESISTOR,CHIP,0OHM 1/10W
R4B0, R729	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R601, R700	165210306	RESISTOR,CHIP,10KOHM 1/10W
R602, R603	16521R006	RESISTOR,CHIP,1OHM 1/10W
R604	16521R006	RESISTOR,CHIP,1OHM 1/10W
R605	16131R004	RESISTOR,CARBON,1OHM 1/6W
R606, R819	165222106	RESISTOR,CHIP,220OHM 1/10W
R701, R732	165210306	RESISTOR,CHIP,10KOHM 1/10W
R702, R840	165215306	RESISTOR,CHIP,15KOHM 1/10W
R706	165239306	RESISTOR,CHIP,39KOHM 1/10W
R708, R709	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R710, R711	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R712, R713	165247206	RESISTOR,CHIP,4.7KOHM 1/10W

PC BOARD ASS'Y (MAIN)**NOTE:** ◇: FOR 2 HEAD WITH S.V. MODEL ONLY ◎: FOR 2 HEAD FULL MODEL ONLY. △: FOR 4 HEAD FULL MODEL ONLY.

Ref. No.	Part No.	Description
R714, R821	165282106	RESISTOR,CHIP,820OHM 1/10W
R715	165268406	RESISTOR,CHIP,680KOHM 1/10W
R716	165222406	RESISTOR,CHIP,220KOHM 1/10W
R717, R816	165247106	RESISTOR,CHIP,470OHM 1/10W
R718	165247406	RESISTOR,CHIP,470KOHM 1/10W
R719	165247406	RESISTOR,CHIP,470KOHM 1/10W
R720, R723	165256306	RESISTOR,CHIP,56KOHM 1/10W
R722, R731	165210206	RESISTOR,CHIP,1KOHM 1/10W
R724, R734	165218206	RESISTOR,CHIP,1.8KOHM 1/10W
R725, R726	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R730, R733	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R735, R736	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R737, R738	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R739, R744	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R740, R741	165247306	RESISTOR,CHIP,47KOHM 1/10W
R742, R743	165210406	RESISTOR,CHIP,100KOHM 1/10W
R748	165212306	RESISTOR,CHIP,12KOHM 1/10W
R750, R751	165275006	RESISTOR,CHIP,75OHM 1/10W
R753, R754	165200006	RESISTOR,CHIP,0OHM 1/10W
R755	165220306	RESISTOR,CHIP,20.0KOHM 1/10W
R756	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
R757	165233206	RESISTOR,CHIP,3.3KOHM 1/10W
R758, R762	165210306	RESISTOR,CHIP,10KOHM 1/10W
R759, R764	165247306	RESISTOR,CHIP,47KOHM 1/10W
R760, R763	165200006	RESISTOR,CHIP,0OHM 1/10W
R761, R767	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R768, R827	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R769, R820	165210206	RESISTOR,CHIP,1KOHM 1/10W
△ ◎ R771	165210306	RESISTOR,CHIP,10KOHM 1/10W
R772	165210306	RESISTOR,CHIP,10KOHM 1/10W
R773, R775	165210306	RESISTOR,CHIP,10KOHM 1/10W
△ R776	165210306	RESISTOR,CHIP,10KOHM 1/10W
R780	165210306	RESISTOR,CHIP,10KOHM 1/10W
R781, R799	165200006	RESISTOR,CHIP,0OHM 1/10W
R782, R783	165210306	RESISTOR,CHIP,10KOHM 1/10W
R784, R785	165210306	RESISTOR,CHIP,10KOHM 1/10W
△ R787	165210306	RESISTOR,CHIP,10KOHM 1/10W
R788	165210306	RESISTOR,CHIP,10KOHM 1/10W
R796	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R798, R831	165210306	RESISTOR,CHIP,10KOHM 1/10W
◇ R7A0	165210306	RESISTOR,CHIP,10KOHM 1/10W
R800	16C34R71A	RESISTOR4.7OHM 3W
R801, R802	161382304	RESISTOR,CARBON,82KOHM 1/6W
R803, R804	161382304	RESISTOR,CARBON,82KOHM 1/6W
R805, R806	161368304	RESISTOR,CARBON,68KOHM 1/6W
R807, R808	161368304	RESISTOR,CARBON,68KOHM 1/6W

PC BOARD ASS'Y (MAIN)**NOTE:** △: FOR 4 HEAD FULL MODEL ONLY.

Ref. No.	Part No.	Description
R811	16411210A	RESISTOR,OXIDE METAL FILM,120OHM 1W
R813	16311R20A	RESISTOR,METAL FILM,1.2OHM 1/2W
R814	16D38231A	RESISTOR82KOHM 3W
R822	165C30206	RESISTOR,CHIP,2KOHM 1/10W
R823	165C20206	RESISTOR,CHIP,2KOHM 1/10W
R824	165215106	RESISTOR,CHIP,150OHM 1/10W
R825, R826	165247006	RESISTOR,CHIP,470OHM 1/10W
R830	165218306	RESISTOR,CHIP,18KOHM 1/10W
R832	165239206	RESISTOR,CHIP,3.9KOHM 1/10W
R833	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R839, R894	165247106	RESISTOR,CHIP,470OHM 1/10W
R841, R845	165210206	RESISTOR,CHIP,1KOHM 1/10W
R842	165210306	RESISTOR,CHIP,10KOHM 1/10W
R843, R844	161322204	RESISTOR,CARBON,2.2KOHM 1/6W
R892	165233106	RESISTOR,CHIP,330OHM 1/10W
R895, R896	165247106	RESISTOR,CHIP,470OHM 1/10W
R897	161322104	RESISTOR,CARBON,220OHM 1/6W
R899	16132R204	RESISTOR,CARBON,2.2OHM 1/6W
RA02	165210206	RESISTOR,CHIP,1KOHM 1/10W
△ RE01	165222206	RESISTOR,CHIP,2.2 KOHM 1/10W
△ RE02	165210406	RESISTOR,CHIP,100KOHM 1/10W
△ RE03	165210506	RESISTOR,CHIP,1MOHM 1/10W
△ RE04	165212506	RESISTOR,CHIP,1200KOHM 1/10W
△ RE05	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
△ RE06	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
△ RE07	165212506	RESISTOR,CHIP,1200KOHM 1/10W
SW700	23H10150	SWITCH MMS00370ZMB0
SW702, SW703	23A11620	SWITCH SKHVBH-RT
SW704, SW710	23A11620	SWITCH SKHVBH-RT
SW709	23A11630	SWITCH MPU10252MLB1
T800	174401630	TRANSFORMER,SWT-SRW2929ED641V0
Z800	26GA022	MINI FUSE T1.6A250V
	28004530	INSULATOR(I.C.) FOR IC700

12. PC BOARD ASS'Y (KEY-L,R) PARTS LIST FOR MONAURAL MODEL

PC BOARD ASSY (KEY-L)

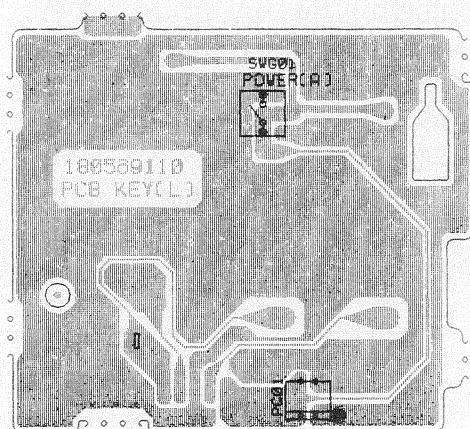
Ref. No.	Part No.	Description
PG01	1981250G2	POST-20-8283-002
☆ SWG02	23A11620	SWITCH SKHVBH-RT

PC BOARD ASSY (KEY-R)

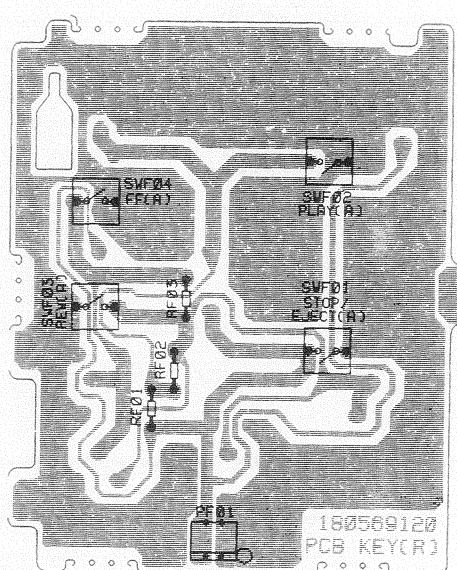
Ref. No.	Part No.	Description
PF01	1981250G2	POST-20-8283-002
RF01	161333209	RESISTOR,CARBON,3.3KOHM 1/6W
RF02	161368209	RESISTOR,CARBON,6.8KOHM 1/4W
RF03	161320309	RESISTOR,CARBON,20KOHM 1/6W
☆ SWF05, SWF06	23A11620	SWITCH SKHVBH-RT
☆ SWF07, SWF08	23A11620	SWITCH SKHVBH-RT

13. PC BOARD ASS'Y (KEY-L, R) PARTS LOCATION FOR MONAURAL MODEL

KEY-L



KEY-R



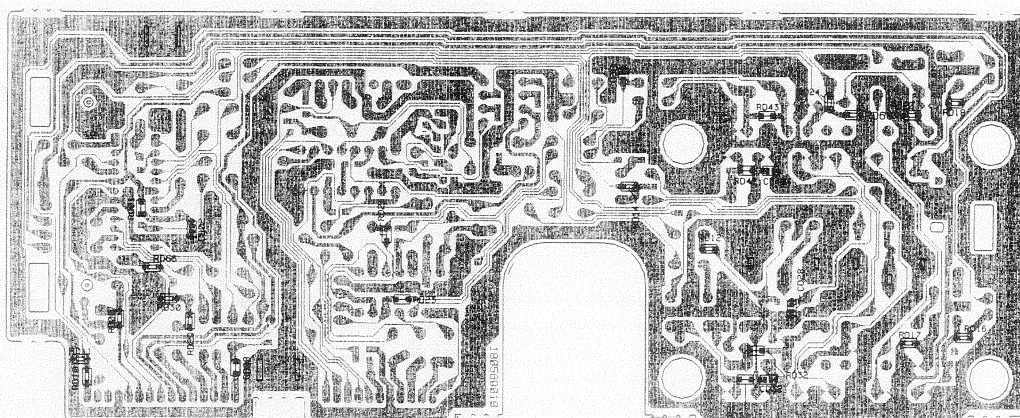
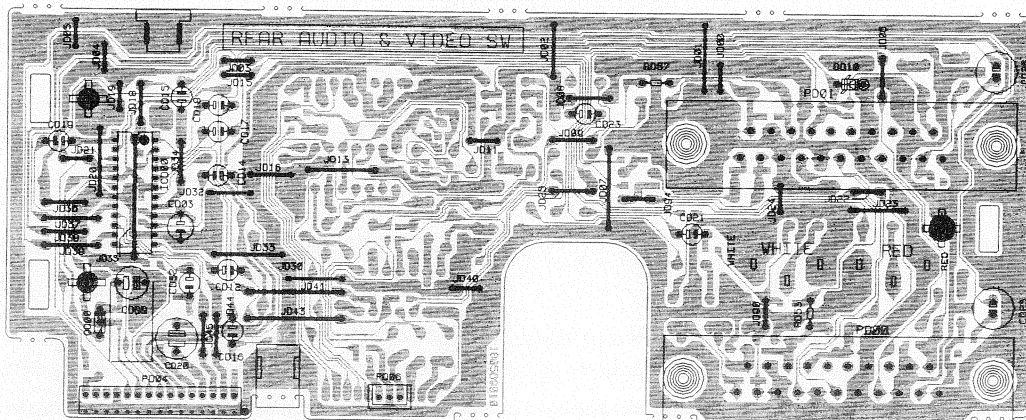
- ☆ When replacing a function switch (POWER, PLAY, STOP/EJECT, FF, REW) whose position differs according to face type, you can re-install the switch at its original position by noting the location where the switch was removed on the model to be repaired. This manual therefore doesn't give the switch layout for each type, but rather gives one type as an example. Sub circuit boards are not used for models where all function switches are positioned on the main circuit board. When ordering the function switch parts, indicate the Part No. 23A11620 regardless of the type.

14. PC BOARD ASS'Y (REAR SUB) PARTS LIST FOR MONAURAL 2 SCART MODEL

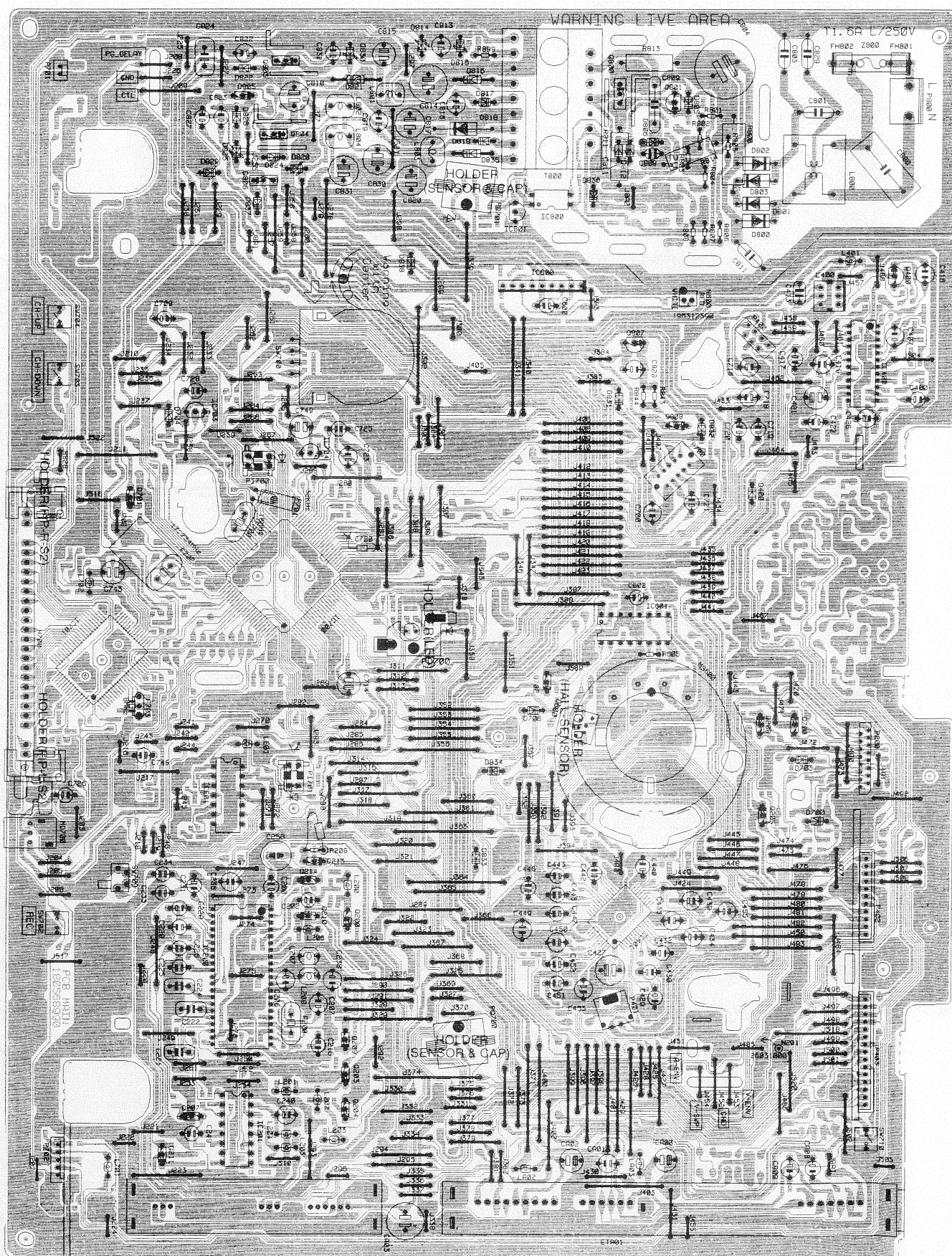
PC BOARD ASSY(REAR SUB)

Ref. No.	Part No.	Description
CD00	1553476K5	CAPACITOR,ELECTROLYTIC,47UF 16V
CD02	157C1030E	CAPACITOR,CHIP,0.01UF 25V
CD03	155347625	CE-SSM47M16-FT
CD12, CD14	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD15, CD16	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD17, CD18	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD19, CD21	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD20	1552227K5	CAPACITOR,ELECTROLYTIC,220UF 10V
CD23, CD52	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD25, CD26	155A477K6	CAPACITOR,ELECTROLYTIC,470UF 4V
CD28, CD32	157A2220E	CAPACITOR,CHIP,2200PF 50V
CD36, CD40	157A2220E	CAPACITOR,CHIP,2200PF 50V
DD10	134013919	DIODE,ZENER,MTZJ4.7-B,C-RT
PD00, PD01	26563510	CONN HRC-021H-03
PD04	1981332DF	POST-9115S-15L
PD06	1981332D3	POST-9115S-03L
QD00	123319911	TRANSISTOR,2SC3199T-Y,GR
RD00	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
RD01, RD08	165200006	RESISTOR,CHIP,0OHM 1/10W
RD10	165247106	RESISTOR,CHIP,470OHM 1/10W
RD11, RD12	165210206	RESISTOR,CHIP,1KOHM 1/10W
RD14	165210206	RESISTOR,CHIP,1KOHM 1/10W
RD16, RD17	165275006	RESISTOR,CHIP,75OHM 1/10W
RD18, RD20	165275006	RESISTOR,CHIP,75OHM 1/10W
RD21, RD23	165200006	RESISTOR,CHIP,0OHM 1/10W
RD24	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
RD29, RD30	165275006	RESISTOR,CHIP,75OHM 1/10W
RD31, RD32	165200006	RESISTOR,CHIP,0OHM 1/10W
RD42, RD43	165200006	RESISTOR,CHIP,0OHM 1/10W
RD53, RD57	161356109	RESISTOR,CARBON,560OHM 1/6W
RD66	165247306	RESISTOR,CHIP,47KOHM 1/10W
RD68	165210406	RESISTOR,CHIP,100KOHM 1/10W
RD69	165200006	RESISTOR,CHIP,0OHM 1/10W
ICD00	111731300	IC,LA7156

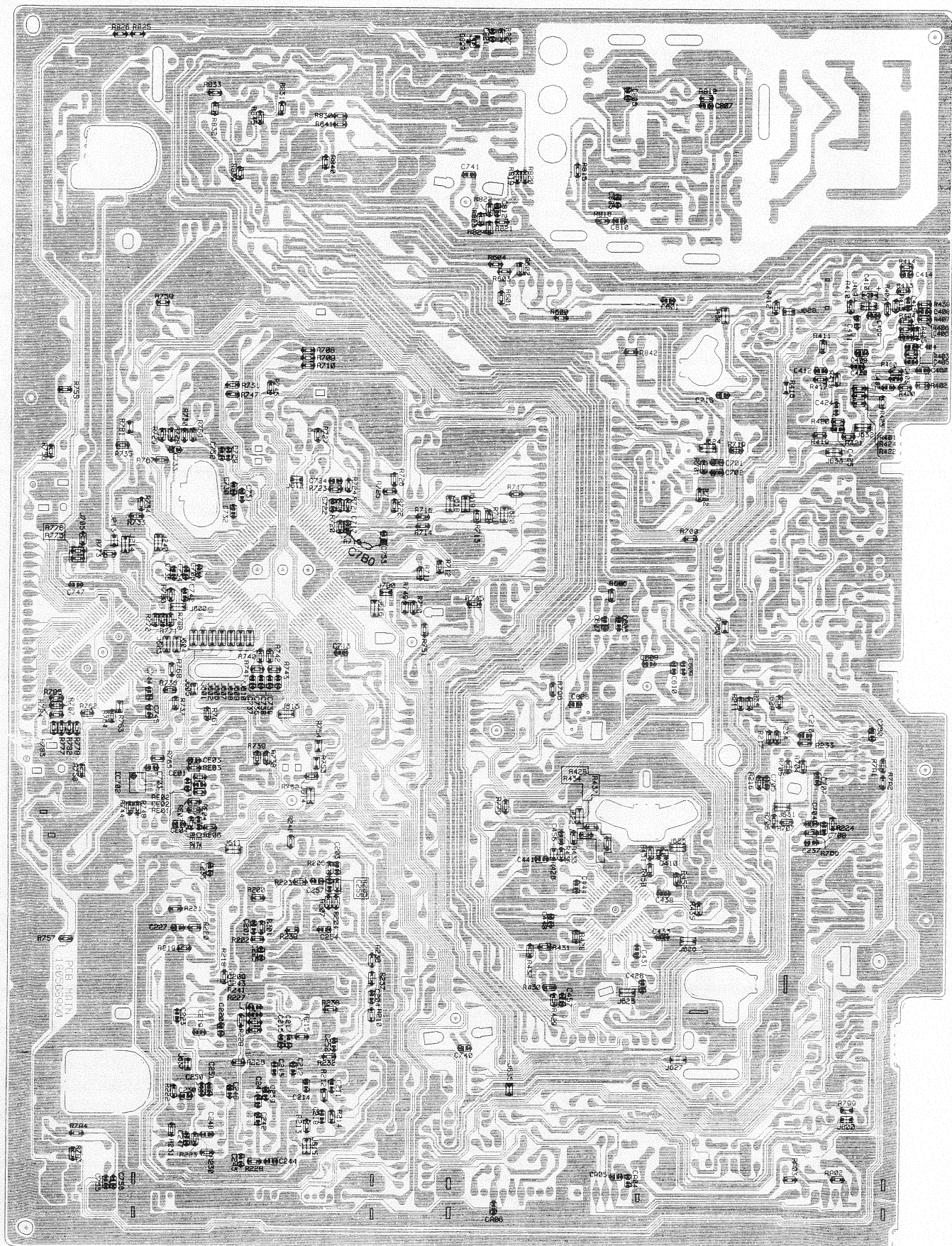
15. PC BOARD ASS'Y (REAR SUB) PARTS LOCATION FOR MONAURAL 2 SCART MODEL



PC BOARD ASS'Y (MAIN)



PC BOARD ASS'Y (MAIN)



17. PC BOARD ASS'Y (MAIN) PARTS LIST FOR Hi-Fi MODEL

PC BOARD ASSY (MAIN)

Ref. No.	Part No.	Description
BLA01	37279B0	BL ASSY DUAL
C200, C231	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
C201, C436	15712210E	CAPACITOR,CHIP,220PF 50V
C202, C226	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C203, C218	15714700E	CAPACITOR,CHIP,47PF 50V
C204, C210	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C205, C220	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C206, C236	1552107G5	CAPACITOR,ELECTROLYTIC,100UF 10V
C207, C426	155322625	CAPACITOR,ELECTROLYTIC,22UF 16V
C209	157A1830E	CAPACITOR,CHIP,0.018UF 25V
C211, C214	15711200E	CAPACITOR,CHIP,12PF 50V
C212, C731	15711800E	CAPACITOR,CHIP,18PF 50V
C213	15788210E	CAPACITOR,CHIP,820PF 50V
C215	15711500E	CAPACITOR,CHIP,15PF 50V
C216, C417	155647425	CAPACITOR,ELECTROLYTIC,0.47UF 50V
C217	157F2720E	CAPACITOR,CHIP,2700PF 50V
C219	157A2210E	CAPACITOR,CHIP,220PF 50V
C221	154C12424	CAPACITOR,FILM,0.12UF 50V
C222	154C33424	CAPACITOR,FILM,0.33UF 50V
C223, C237	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C224	154C56324	CAPACITOR,FILM,0.056UF 50V
C225	155633425	CAPACITOR,ELECTROLYTIC,0.33UF 50V
C227	157A6820E	CAPACITOR,CHIP,6800PF 50V
C228, C400	155633525	CAPACITOR,ELECTROLYTIC,3.3UF 50V
C229, C429	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C230	15718200E	CAPACITOR,CHIP,82PF 50V
C233, C234	155547525	CAPACITOR,ELECTROLYTIC,4.7UF 35V
C235, C242	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C238	155110725	CE-SSM100M6.3-FT
C239, C241	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C240	1552107G5	CAPACITOR,ELECTROLYTIC,100UF 10V
C243, C252	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C244, C246	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C245	157A4720E	CAPACITOR,CHIP,4700PF 50V
C247, C250	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C248, C603	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C249, C422	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
C251, C406	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C254	15783910E	CAPACITOR,CHIP,390PF 50V
C255, C456	15786810E	CAPACITOR,CHIP,680PF 50V
C256	1552227K6	CAPACITOR,ELECTROLYTIC,220UF 10V
C402, C403	157B1040E	CAPACITOR,CHIP,0.1UF 25V
C404	157F5620E	CAPACITOR,CHIP,5600PF 50V
C405, C715	157A2220E	CAPACITOR,CHIP,2200PF 50V
C407, C419	1553476G5	CAPACITOR,ELECTROLYTIC,47UF 16V

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
C408	15714700E	CAPACITOR,CHIP,47PF 50V
C409	15784710E	CAPACITOR,CHIP,470PF 50V
C410	15821050D	CAPACITOR,CHIP,TANTALUM,1UF 10V
C411	157A1520E	CAPACITOR,CHIP,1500PF 50V
C412	157A1020E	CAPACITOR,CHIP,1000PF 50V
C413	153C4730S	CAPACITOR,MYLAR,0.047UF 100V
C414, C415, C425	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C416	15500532S	CAPACITOR,ELECTROLYTIC,47UF 16V BP
C420, C424	157B1040E	CAPACITOR,CHIP,0.1UF 25V
C421	15531072S	CAPACITOR,ELECTROLYTIC,100UF 16V
C427	1551337K5	CAPACITOR,ELECTROLYTIC,330UF 6.3V
C428, C431	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C430, C432	15531062S	CAPACITOR,ELECTROLYTIC,10UF 16V
C433, C444	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C434, C435	15532262S	CAPACITOR,ELECTROLYTIC,22UF 16V
C438	157C2240E	CAPACITOR,CHIP,0.22UF 25V
C439, C716	15534762S	CE-SSM47M16-FT
C440, C442	15561052S	CAPACITOR,ELECTROLYTIC,1UF 50V
C441	157A5630E	CI-2125B563K25-CT
C443, C445	15531062S	CAPACITOR,ELECTROLYTIC,10UF 16V
C446, C451	15561052S	CAPACITOR,ELECTROLYTIC,1UF 50V
C447, C600	15531062S	CAPACITOR,ELECTROLYTIC,10UF 16V
C448, C703	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C449, C450	15532262S	CAPACITOR,ELECTROLYTIC,22UF 16V
C452, C719	15561052S	CAPACITOR,ELECTROLYTIC,1UF 50V
C453, C455	15532262S	CAPACITOR,ELECTROLYTIC,22UF 16V
C457, C807	157A3320E	CAPACITOR,CHIP,3300PF 50V
C460, C736	157A1020E	CAPACITOR,CHIP,1000PF 50V
C601, C607	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C602, C709	15531062S	CAPACITOR,ELECTROLYTIC,10UF 16V
C606	157A1040E	CAPACITOR,CHIP,0.1UF 25V
C608, C609	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C610, C701	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C700	15532262S	CAPACITOR,ELECTROLYTIC,22UF 16V
C702, C704	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C705	157C2230E	CI-2125F223Z25-CT
C706, C713	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C707	15711810E	CAPACITOR,CHIP,180PF 50V
C708, C722	15711010E	CAPACITOR,CHIP,100PF 50V
C714, C743	1552107K5	CAPACITOR,ELECTROLYTIC,100UF 10V
C717	15711510E	CAPACITOR,CHIP,150PF 50V
C718, C723	15534762S	CE-SSM47M16-FT
C720, C721	15561052S	CAPACITOR,ELECTROLYTIC,1UF 50V
C724	15711010E	CAPACITOR,CHIP,100PF 50V
C725	15561052S	CAPACITOR,ELECTROLYTIC,1UF 50V
C726, C728	15531062S	CAPACITOR,ELECTROLYTIC,10UF 16V
C729, C730	15711000E	CAPACITOR,CHIP,10PF 50V

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
C732	15711000E	CAPACITOR,CHIP,10PF 50V
C733, C738	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C734, C735	15711800E	CAPACITOR,CHIP,18PF 50V
C737, C750	157A1020E	CAPACITOR,CHIP,1000PF 50V
C739, C742	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C740, C741	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C744, C745	15713000E	CAPACITOR,CHIP,30P
C747, C752	157A1030E	CAPACITOR,CHIP,0.01UF 25V
C748, C827	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
C749	1552107K5	CAPACITOR,ELECTROLYTIC,100UF 10V
C753	157C1050E	CAPACITOR,CHIP,1UF 16V
C755, CA04	157A1020E	CAPACITOR,CHIP,1000PF 50V
C756, CE05	157A2220E	CAPACITOR,CHIP,2200PF 50V
C7B0	151147005	CAPACITOR,CERAMIC, 47PF 50V
C800	150908900	CC-CFJC22E104M
C801	150909823	CC-CS15-E2GA472MYNS-FS
C803, C829	150910023	CC-CD85-B2GA221KYNS-FS
C804	15CK47620	CE-HPC47M400
C805, CA06	157A2230E	CAPACITOR,CHIP,0.022UF 25V
C806	157A2730E	CAPACITOR,CHIP,0.027UF 25V
C808	150908015	CC-SL560J1000-FT
C809	150907710	CC-B103K500
C810	157F8220E	CAPACITOR,CHIP,8200PF 50V
C811	150910723	CC-CD14-E2GA332MYNS-FS
C812, CE02	157A3330E	CAPACITOR,CHIP,0.033UF 25V
C813	1553107T5	CAPACITOR,ELECTROLYTIC,100UF 16V
C814	1552477J4	CAPACITOR,ELECTROLYTIC,470UF 10V
C815, CA00	1551108M5	CAPACITOR,ELECTROLYTIC,1000U 6.3V
C816, C819	1556226T5	CAPACITOR,ELECTROLYTIC,22UF 50V
C817, C830	1553277J5	CAPACITOR,ELECTROLYTIC,270UF 16V
C818, C820	1553477T5	CAPACITOR,ELECTROLYTIC,470UF 16V
C821, CE03	157C1030E	CAPACITOR,CHIP,0.01UF 25V
C822, CA09	1553476G5	CAPACITOR,ELECTROLYTIC,47UF 16V
C823	155647425	CAPACITOR,ELECTROLYTIC,0.47UF 50V
C824	1507026J5	CAPACITOR,SUPER,DX-5R5L224-FT
C828	155347625	CE-SSM47M16-FT
C831	1553477T5	CAPACITOR,ELECTROLYTIC,470UF 16V
C832, CA08	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CA01	155510625	CAPACITOR,ELECTROLYTIC,10UF 35V
CA02	1553107G5	CAPACITOR,ELECTROLYTIC,100UF 16V
CA03	1553477M5	CAPACITOR,ELECTROLYTIC,470UF 16V
CA05	157A1020E	CAPACITOR,CHIP,1000PF 50V
CE01	15781510E	CAPACITOR,CHIP,150PF 50V
CE04	157A3330E	CAPACITOR,CHIP,0.033UF 25V
D400, D700	131002101	DIODE,1SS254T
D600	136400110	DI-HW300B-E,F
D703, D704	131002101	DIODE,1SS254T

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
D706, D805	131002101	DIODE,1SS254T
D800, D801	132016401	DIODE,D5GT
D802, D803	132016401	DIODE,D5GT
D806	132014606	DIODE,EG01C-FT
D811, D812	131002101	DIODE,1SS254T
D814	134015021	DIODE,ZENER,MTZJ6.2T-B
D815	134015131	DIODE,ZENER,MTZJ6.8T-B
D816, D835	132016308	DIODE,SB130-B
D817, D819	131003001	DIODE,1SS244T
D818	132013508	DIODE,RU2YX-PF
D820	134019511	DIODE,ZENER,MTZJ33T-A,B
D821	132016708	DIODE,LT2A04-E
D822, D831	132016501	DIODE,D5GT
D824, D826	131002101	DIODE,1SS254T
D825	134016621	DIODE,ZENER,MTZJ11T-A
D829	134014611	DIODE,ZENER,MTZJ9.1T-C
D830	134014511	DIODE,ZENER,MTZJ5.6T-C
D832, D838	132016501	DIODE,D5GT
D833, D834	131002101	DIODE,1SS254T
D836, D837	131002101	DIODE,1SS254T
D899	132003203	DIODE, DAN202KT
ETA01	104307320	ELECTRONIC TUNER,TMLG2X105A
F200	1764167C0	X'TAL,HC-49U-4.43MHZ-T1
F700	1764161B0	X'TAL,HC-49U-16MHZ-T1
F701	176300500	X'TAL,32.768KHZ-10PPM
F702	1764166C0	X'TAL,HC-49U-17.734MHZ-T1
F703	1753081D0	CERAMIC FILTER,KBR-8.0M
FH801, FH802	26N20110	FUSE HOLDER CNT47
H700	143002200	FIP,SVV-7SS16
IC200	111768200	IC,TA1258N
IC201	111769200	IC,TL8850AP
IC400	111717300	IC,LA7286
IC401	111767200	IC,TA1246AF
IC600	111718200	IC,TA7291S
IC601	112293200	IC,TB6515AP
IC700	119383200	IC,TMP90CS74DF-6671 (Z)
IC701	119384200	IC,TMP87CH70BF-6632
IC702	113113B03 (See the last page)	IC,AT24C04N-10SC-CT
IC703	111799D07	IC,XC61AN3202TH-RT
IC704	111658D07	IC,XC61AN4502TH-RT
IC800	145300900	PHOTOCOUPLER,PS2561-1-MDHW-V
IC801	111737A07	IC-KIA431AT-RT
ICE01	111765800	IC,SDA5649
J213, J605	165200006	RESISTOR,CHIP,00HM 1/10W
J214, J240	165100006	RESISTOR,CHIP,00HM 1/8W
J432, J489, J600	165100006	RESISTOR,CHIP,00HM 1/8W
J601, J602	165100006	RESISTOR,CHIP,00HM 1/8W

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
J603, J604	165100006	RESISTOR,CHIP,00HM 1/8W
J606, J607	165100006	RESISTOR,CHIP,00HM 1/8W
J608, J609	165100006	RESISTOR,CHIP,00HM 1/8W
J610, J611	165100006	RESISTOR,CHIP,00HM 1/8W
J612, J628	165200006	RESISTOR,CHIP,00HM 1/10W
J613, J614	165100006	RESISTOR,CHIP,00HM 1/8W
J615, J616	165100006	RESISTOR,CHIP,00HM 1/8W
J618, J619	165100006	RESISTOR,CHIP,00HM 1/8W
J620, J622	165100006	RESISTOR,CHIP,00HM 1/8W
J623, J624	165100006	RESISTOR,CHIP,00HM 1/8W
J625, J626	165100006	RESISTOR,CHIP,00HM 1/8W
J627, J631	165100006	RESISTOR,CHIP,00HM 1/8W
J629, J705	165210306	RESISTOR,CHIP,10KOHM 1/10W
J632, J633	165100006	RESISTOR,CHIP,00HM 1/8W
J635, J7B0, J637	165200006	RESISTOR,CHIP,00HM 1/10W
J800, R416	165200006	RESISTOR,CHIP,00HM 1/10W
L200	172025134	COIL,EL0305RA-680J-FT
L201	172025334	COIL,EL0305RA-151J-FT
L202	172019327	COIL,LF-5.0-270J-ST
L203	172024834	COIL,EL0305RA-220J-FT
L204, L205	172025234	COIL,EL0305RA-101J-FT
L206, L401	172025234	COIL,EL0305RA-101J-FT
L207, L208	1720077C4	COIL,FLR50T50-101J-FT
L400	171055600	COIL,OSC-BIAS (11V)
L701	172024334	COIL,EL0305RA-3R3J-FT
L702	172012227	L-LF-5.0-470J-ST
L800	173006730	COIL,HF2022-183Y0R5-01
L801, L802	172023534	COIL,ELC0607RA-220K-FT
L803, L804	172023534	COIL,ELC0607RA-220K-FT
LA02	172024634	COIL,EL0305RA-100J-FT
LA03	172024734	COIL,EL0305RA-150J-FT
LE01	172025234	COIL,EL0305RA-101J-FT
MD700	106012600	MODULE,PIC-21143LJ
MP300	22129070	HOLDER (LED)
MP301, MP302	22129080	HOLDER (SENSOR)
MP303	22129090	HOLDER (HALL-SENSOR)
MP304, MP305	22129100	HOLDER (SENSOR-CAP)
MP306	22128890	HOLDER (FIP-L-S2)
MP307	22128910	HOLDER (FIP-R-S2)
MP308, MP309	21144810	HEATSINK
MP310, MP311	2953308A	DPBB-3X8SSA
MS600	100008500	MS-STATOR,ASSY
N201	26031000	GROUND CORD ##
N600	196312390	QS-CONN-IL02 ##
P200	1981334GG	POST-00-6232-016-006-8
P400	1981335G7	POST-006216-007-000808
P401	1981340A2	POST-TMC-A02X-A1

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
P402	1981333DB	POST-9115B-11
P403	1981333DF	POST-9115B-15
P700	1981322AA	POST-TKC-G10P-A1
P701	1981270G2	POST-00-8283-0212-0
P702	1981333D5	POST-9115B-05
P800	198130722	POST-B2P3-VH
PD700	145200100	PHOTODIODE, GL451V
PI700, PI701	145400300	PHOTOINTERRUPTER, GP1S566
PQ700, PQ701	145100100	PHOTOTRANSISTOR, PT493F
Q200, Q205	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q203, Q207	121126711	TRANSISTOR, 2SA1267T-GR
Q204	120004601	TRANSISTOR, RN1203, TPE4
Q208, Q209	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q210, Q214	121126711	TRANSISTOR, 2SA1267T-GR
Q211, Q213	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q400	123195901	TRANSISTOR, 2SC1959T-GR
Q410	12110372B	TRANSISTOR, 2SA1037AKT146-Q, R
Q700, Q702	120002601	TRANSISTOR, DTC114TST
Q701	121126711	TRANSISTOR, 2SA1267T-GR
Q800	123451700	TRANSISTOR, 2SC4517
Q801	124213201	TRANSISTOR, 2SD2132T-V, W
Q803, Q804	124239600	TRANSISTOR, 2SD2396-J, K
Q805	123319911	TRANSISTOR, 2SC3199T-Y, GR
Q806	124185811	TRANSISTOR, 2SD1858T-Q, R
Q807	121102031	TRANSISTOR, 2SA1020T-O, Y
Q808	120010501	TRANSISTOR, KRC102MT
R200, R428	165222506	RESISTOR, CHIP, 2.2MOHM 1/10W
R201	165251206	RESISTOR, CHIP, 5.1KOHM 1/10W
R202, R402	165210206	RESISTOR, CHIP, 1KOHM 1/10W
R203, R233	165210106	RESISTOR, CHIP, 100OHM 1/10W
R204, R211, R207	165268106	RESISTOR, CHIP, 680OHM 1/10W
R205, R212	165215206	RESISTOR, CHIP, 1.5KOHM 1/10W
R206, R210	165222206	RESISTOR, CHIP, 2.2KOHM 1/10W
R208	161C22108	RESISTOR, CARBON, 220OHM 1/2W
R214, R216	165282106	RESISTOR, CHIP, 820OHM 1/10W
R215, R436	165233306	RESISTOR, CHIP, 33KOHM 1/10W
R217, R222	165233106	RESISTOR, CHIP, 330OHM 1/10W
R218, R705	165247306	RESISTOR, CHIP, 47KOHM 1/10W
R219, R221	165210506	RESISTOR, CHIP, 1MOHM 1/10W
R220, R234	165210306	RESISTOR, CHIP, 10KOHM 1/10W
R223, R236	165215206	RESISTOR, CHIP, 1.5KOHM 1/10W
R224, R228	165222206	RESISTOR, CHIP, 2.2KOHM 1/10W
R226, R706	165222306	RESISTOR, CHIP, 22KOHM 1/10W
R227, R404	165212306	RESISTOR, CHIP, 12KOHM 1/10W
R229, R239	165282106	RESISTOR, CHIP, 820OHM 1/10W
R230, R238	165222206	RESISTOR, CHIP, 2.2KOHM 1/10W
R231, RA03	165212206	RESISTOR, CHIP, 1.2KOHM 1/10W

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
R232, R423	165233206	RESISTOR,CHIP,3.3KOHM 1/10W
R235, R830	165218306	RESISTOR,CHIP,18KOHM 1/10W
R237, R418	165215206	RESISTOR,CHIP,1.5KOHM 1/10W
R241, R400	165210306	RESISTOR,CHIP,10KOHM 1/10W
R246, R422	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R401, R707	165210406	RESISTOR,CHIP,100KOHM 1/10W
R403, R728	165256206	RESISTOR,CHIP,5.6KOHM 1/10W
R405, R434	165210206	RESISTOR,CHIP,1KOHM 1/10W
R406	165233406	RESISTOR,CHIP,330KOHM 1/10W
R407, R412	165218106	RESISTOR,CHIP,180OHM 1/10W
R409, R765	165210106	RESISTOR,CHIP,100OHM 1/10W
R410	165215406	RESISTOR,CHIP,150KOHM 1/10W
R411, R430	165227306	RESISTOR,CHIP,27KOHM 1/10W
R413, R417	165247006	RESISTOR,CHIP,47OHM 1/10W
R414, R747	165212306	RESISTOR,CHIP,12KOHM 1/10W
R415	16524R706	RESISTOR,CHIP,4.7OHM 1/10W
R416, R426, R749	165200006	RESISTOR,CHIP,0OHM 1/10W
R419, R421	165227206	RESISTOR,CHIP,2.7KOHM 1/10W
R420, R451	165215206	RESISTOR,CHIP,1.5KOHM 1/10W
R424, R812	165239206	RESISTOR,CHIP,3.9KOHM 1/10W
R425	165218106	RESISTOR,CHIP,180OHM 1/10W
R429, R432	165239306	RESISTOR,CHIP,39KOHM 1/10W
R431, R746	165227306	RESISTOR,CHIP,27KOHM 1/10W
R433, R721	165218206	RESISTOR,CHIP,1.8KOHM 1/10W
R435, RE03	165210506	RESISTOR,CHIP,1MOHM 1/10W
R437	165268106	RESISTOR,CHIP,680OHM 1/10W
R450, R452	165227206	RESISTOR,CHIP,2.7KOHM 1/10W
R460	165215206	RESISTOR,CHIP,1.5KOHM 1/10W
R600, R601	165210306	RESISTOR,CHIP,10KOHM 1/10W
R602, R603	16521R006	RESISTOR,CHIP,1OHM 1/10W
R604	16521R006	RESISTOR,CHIP,1OHM 1/10W
R605	16131R004	RESISTOR,CARBON,1OHM 1/6W
R606, R819	165222106	RESISTOR,CHIP,220OHM 1/10W
R700, R701	165210306	RESISTOR,CHIP,10KOHM 1/10W
R702, R840	165215306	RESISTOR,CHIP,15KOHM 1/10W
R704, R758	165210306	RESISTOR,CHIP,10KOHM 1/10W
R708, R709	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R710, R711	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R712, R713	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R714, R821	165282106	RESISTOR,CHIP,820OHM 1/10W
R715	165268406	RESISTOR,CHIP,680KOHM 1/10W
R716	165222406	RESISTOR,CHIP,220KOHM 1/10W
R717, R816	165247106	RESISTOR,CHIP,470OHM 1/10W
R718, R719	165247406	RESISTOR,CHIP,470KOHM 1/10W
R720, R723	165256306	RESISTOR,CHIP,56KOHM 1/10W
R722, R731	165210206	RESISTOR,CHIP,1KOHM 1/10W
R724, R734	165218206	RESISTOR,CHIP,1.8KOHM 1/10W

PC BOARD ASS'Y (MAIN)

Ref. No.	Part No.	Description
R725, R726	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R727, R740	165247306	RESISTOR,CHIP,47KOHM 1/10W
R729, R730	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R733, R796	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
R735, R736	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R737, R738	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R739, R744	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R741, R759	165247306	RESISTOR,CHIP,47KOHM 1/10W
R742, R743	165210406	RESISTOR,CHIP,100KOHM 1/10W
R745	165222306	RESISTOR,CHIP,22KOHM 1/10W
R748	165212306	RESISTOR,CHIP,12KOHM 1/10W
R750, R751	165275006	RESISTOR,CHIP,75OHM 1/10W
R752, R824	165215106	RESISTOR,CHIP,150OHM 1/10W
R753, R754	165200006	RESISTOR,CHIP,0OHM 1/10W
R755	165220306	RESISTOR,CHIP,20.0KOHM 1/10W
R756, RE05	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
R757	165233206	RESISTOR,CHIP,3.3KOHM 1/10W
R760, R763	165200006	RESISTOR,CHIP,0OHM 1/10W
R761, R767	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R762, R766	165210306	RESISTOR,CHIP,10KOHM 1/10W
R764	165247306	RESISTOR,CHIP,47KOHM 1/10W
R765	165210106	RESISTOR,CHIP,100OHM 1/10W
R768, R827	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R769, R820	165210206	RESISTOR,CHIP,1KOHM 1/10W
R771, R772	165210306	RESISTOR,CHIP,10KOHM 1/10W
R773, R775	165210306	RESISTOR,CHIP,10KOHM 1/10W
R776, R777	165210306	RESISTOR,CHIP,10KOHM 1/10W
R778	165233306	RESISTOR,CHIP,33KOHM 1/10W
R779, R780	165210306	RESISTOR,CHIP,10KOHM 1/10W
R781, R799	165200006	RESISTOR,CHIP,0OHM 1/10W
R782, R783	165210306	RESISTOR,CHIP,10KOHM 1/10W
R785, R787	165210306	RESISTOR,CHIP,10KOHM 1/10W
R788, R831	165210306	RESISTOR,CHIP,10KOHM 1/10W
R7A1	165268306	RESISTOR,CHIP,68KOHM 1/10W
R7A2	165212406	RESISTOR,CHIP,120KOHM 1/10W
R7A3	165275006	RESISTOR,CHIP,75OHM 1/10W
R7A4	165256106	RESISTOR,CHIP,560OHM 1/10W
R800	16C34R71A	RESISTOR4.7OHM 3W
R801, R802	161382304	RESISTOR,CARBON,82KOHM 1/6W
R803, R804	161382304	RESISTOR,CARBON,82KOHM 1/6W
R805, R806	161368304	RESISTOR,CARBON,68KOHM 1/6W
R807, R808	161368304	RESISTOR,CARBON,68KOHM 1/6W
R811	16411210A	RESISTOR,OXIDE METAL FILM,120OHM 1W
R813	16311R20A	RESISTOR,METAL FILM,1.2OHM 1/2W
R814	16D28231A	RESISTOR82KOHM 2W
R815	165227206	RESISTOR,CHIP,2.7KOHM 1/10W
R822	165C30206	RESISTOR,CHIP,2KOHM 1/10W

PC BOARD ASS'Y (MAIN)

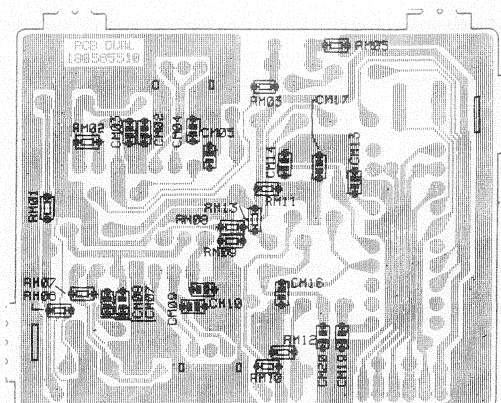
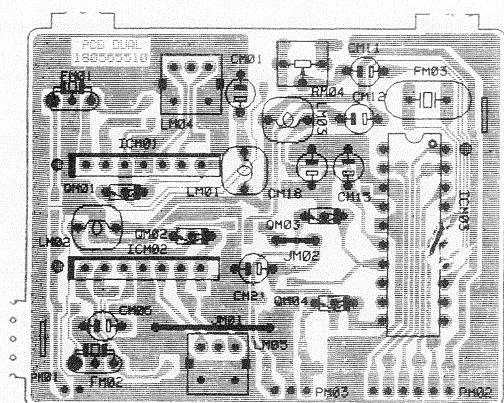
Ref. No.	Part No.	Description
R823	165C20206	RESISTOR,CHIP,2KOHM 1/10W
R825, R826	165247006	RESISTOR,CHIP,47OHM 1/10W
R832	165239206	RESISTOR,CHIP,3.9KOHM 1/10W
R833	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
R839	165247106	RESISTOR,CHIP,470OHM 1/10W
R841, R845	165210206	RESISTOR,CHIP,1KOHM 1/10W
R842	165210306	RESISTOR,CHIP,10KOHM 1/10W
R843, R844	161322204	RESISTOR,CARBON,2.2KOHM 1/6W
R899	16132R204	RESISTOR,CARBON,2.2OHM 1/6W
RA02	165210206	RESISTOR,CHIP,1KOHM 1/10W
RE01	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
RE02	165210406	RESISTOR,CHIP,100KOHM 1/10W
RE04, RE07	165212506	RESISTOR,CHIP,1200KOHM 1/10W
RE06	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
SW700	23H10150	SWITCH MMS00370ZMB0
SW702, SW703	23A11620	SWITCH SKHVBH-RT
SW704, SW710	23A11620	SWITCH SKHVBH-RT
SW709	23A11630	SWITCH MPU10252MLB1
T800	174401630	TRANSFORMER,SWT-SRW2929ED641V0
Z800	26GA022	MINI FUSE T1.6A250V
	28004530	INSULATOR (I.C.) FOR IC700

18. PC BOARD ASS'Y (DUAL) PARTS LIST FOR Hi-Fi MODEL

PC BOARD ASSY(DUAL)

Ref. No.	Part No.	Description
CM01, CM06	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CM02, CM03	157A1030E	CAPACITOR,CHIP,0.01UF 25V
CM04, CM09	15712200E	CAPACITOR,CHIP,22PF 50V
CM05, CM10	15711010E	CAPACITOR,CHIP,100PF 50V
CM07, CM08	157A1030E	CAPACITOR,CHIP,0.01UF 25V
CM11, CM12	155610525	CAPACITOR,ELECTROLYTIC,1UF 50V
CM13, CM14	157A1030E	CAPACITOR,CHIP,0.01UF 25V
CM15, CM18	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CM16, CM19	157A1020E	CAPACITOR,CHIP,1000PF 50V
CM17, CM20	157A1030E	CAPACITOR,CHIP,0.01UF 25V
CM21	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
FM01	175204980	CERAMIC FILTER,SIF5.74MHZ
FM02	175204880	CERAMIC FILTER,SIF5.5MHZ
FM03	1764149B0	X-HC-49U10.000
ICM01, ICM02	111106600	IC,BA403
ICM03	111762800	IC,TDA8417
LM01, LM02	172007634	COIL,EL0606RA-100J-FT
LM03	172007634	COIL,EL0606RA-100J-FT
LM04	171056400	COIL,SIF-5.74MHZ
LM05	171056300	COIL,SIF-5.5MHZ
MP103	21234920	SHIELD PLATE
PM01, PM02	1981314A3	POST-TKX-P03P-F1
PM03	1981314A6	POST-TKX-P06P-F1
QM01, QM02	123245811	TRANSISTOR,2SC2458T-Y,GR
QM03, QM04	123245811	TRANSISTOR,2SC2458T-Y,GR
RM01, RM02	165247106	RESISTOR,CHIP,470OHM 1/10W
RM03	165210106	RESISTOR,CHIP,100OHM 1/10W
RM04	169173399	RESISTOR,SEMI-FIXED,RH0632C-102B-RT
RM05	165210206	RESISTOR,CHIP,1KOHM 1/10W
RM06, RM07	165247106	RESISTOR,CHIP,470OHM 1/10W
RM08	165247106	RESISTOR,CHIP,470OHM 1/10W
RM09	165251106	RESISTOR,CHIP,510.0OHM 1/10W
RM10, RM12	165247206	RESISTOR,CHIP,4.7KOHM 1/10W
RM11, RM13	165222206	RESISTOR,CHIP,2.2KOHM 1/10W

19. PC BOARD ASS'Y (DUAL) PARTS LOCATION FOR Hi-Fi MODEL



20. PC BOARD ASS'Y (KEY-L,R) PARTS LIST FOR Hi-Fi MODEL

PC BOARD ASSY (KEY-L)

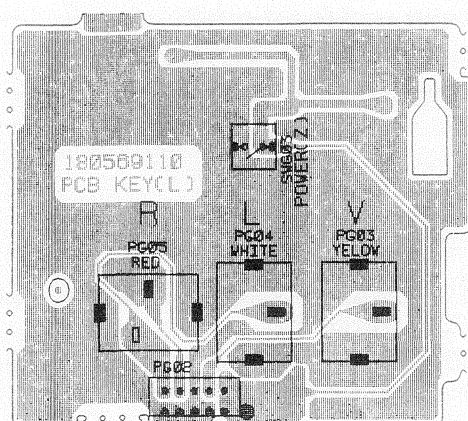
Ref. No.	Part No.	Description
PG02	1981332D5	POST-9115S-05L
PG03	26563500	CONN YKB11-0983
PG04	26563490	CONN YKB11-0982
PG05	26563480	CONN YKB11-0981
☆ SWG03	23A11620	SWITCH SKHVBH-RT

PC BOARD ASSY (KEY-R)

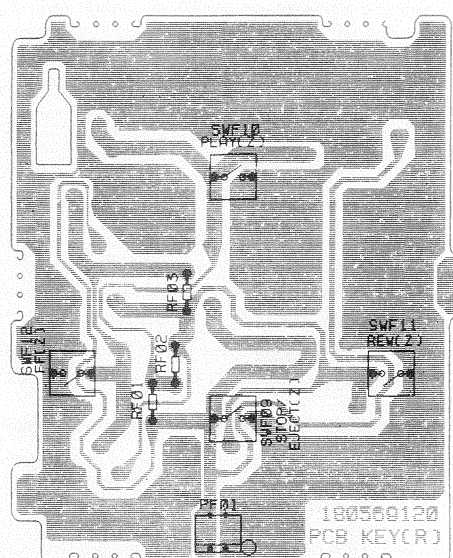
Ref. No.	Part No.	Description
PF01	1981250G2	POST-20-8283-002
RF01	161333209	RESISTOR,CARBON,3.3KOHM 1/6W
RF02	161368209	RESISTOR,CARBON,6.8KOHM 1/4W
RF03	161320309	RESISTOR,CARBON,20KOHM 1/6W
☆ SWF09, SWF10	23A11620	SWITCH SKHVBH-RT
☆ SWF11, SWF12	23A11620	SWITCH SKHVBH-RT

21. PC BOARD ASS'Y (KEY-L, R) PARTS LOCATION FOR Hi-Fi MODEL

KEY-L



KEY-R



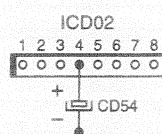
- ☆ When replacing a function switch (POWER, PLAY, STOP/EJECT, FF, REW) whose position differs according to face type, you can re-install the switch at its original position by noting the location where the switch was removed on the model to be repaired. This manual therefore doesn't give the switch layout for each type, but rather gives one type as an example. Sub circuit boards are not used for models where all function switches are positioned on the main circuit board. When ordering the function switch parts, indicate the Part No. 23A11620 regardless of the type.

22. PC BOARD ASS'Y (REAR SUB) PARTS LIST FOR Hi-Fi MODEL**PC BOARD ASSY(REAR SUB)**

Ref. No.	Part No.	Description
CD00	155347625	CE-SSM47M16-FT
CD02	157C1030E	CAPACITOR,CHIP,0.01UF 25V
CD03, CD11	155347625	CE-SSM47M16-FT
CD04, CD05	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD06, CD07	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD08, CD09	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD10, CD12	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD14, CD15	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD16, CD17	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD18, CD19	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD20	1552227K5	CAPACITOR,ELECTROLYTIC,220UF 10V
CD21, CD22	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD23, CD24	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD25, CD26	155A477K6	CAPACITOR,ELECTROLYTIC,470UF 4V
CD28, CD29	157A2220E	CAPACITOR,CHIP,2200PF 50V
CD30, CD38	157A1020E	CAPACITOR,CHIP,1000PF 50V
CD31, CD36	157A2220E	CAPACITOR,CHIP,2200PF 50V
CD37, CD39	157A2220E	CAPACITOR,CHIP,2200PF 50V
CD44, CD45	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD46, CD47	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
CD52, CD53	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
*CD54	155310625	CAPACITOR,ELECTROLYTIC,10UF 16V
(*Note the polarity. Refer to the next page)		
DD10	134013919	DIODE,ZENER,MTZJ4.7-B,C-RT
DD11	134014409	DIODE,ZENER,MTZJ5.1-A,B,C-RT
DD21	131001909	DIODE,1SS133-RT
ICD00	111731300	IC,LA7156
ICD01, ICD03	112304700	IC,CD4053BE
ICD02	111351300	IC,LA7016
ICD04	111198600	IC,BA4558DX
JD49, RD01	165200006	RESISTOR,CHIP,0OHM 1/10W
LD01, LD05	172024334	COIL,EL0305RA-3R3J-FT
PD00, PD01	26563510	CONN HRC-021H-03
PD02	26563490	CONN YKB11-0982
PD03	1981332DB	POST-9115S-11L
PD04	1981332DF	POST-9115S-15L
PD05	26563480	CONN YKB11-0981
QD00	123319911	TRANSISTOR,2SC3199T-Y,GR
RD00	165222206	RESISTOR,CHIP,2.2KOHM 1/10W
RD02, RD08	165268106	RESISTOR,CHIP,680OHM 1/10W
RD03, RD09	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
RD04	161C15208	RESISTOR,CARBON,1.5KOHM 1/2W
RD07	165215206	RESISTOR,CHIP,1.5KOHM 1/10W
RD10, RD11	165268206	RESISTOR,CHIP,6.8KOHM 1/10W

PC BOARD ASSY(REAR SUB)

Ref. No.	Part No.	Description
RD12, RD13	165210206	RESISTOR,CHIP,1KOHM 1/10W
RD14, RD15	165210206	RESISTOR,CHIP,1KOHM 1/10W
RD16, RD17	165275006	RESISTOR,CHIP,75OHM 1/10W
RD18, RD20	165275006	RESISTOR,CHIP,75OHM 1/10W
RD25, RD27	165227206	RESISTOR,CHIP,2.7KOHM 1/10W
RD26, RD28	165210306	RESISTOR,CHIP,10KOHM 1/10W
RD29, RD30	165275006	RESISTOR,CHIP,75OHM 1/10W
RD33, RD34	165210406	RESISTOR,CHIP,100KOHM 1/10W
RD37, RD38	165210406	RESISTOR,CHIP,100KOHM 1/10W
RD39, RD44	165210406	RESISTOR,CHIP,100KOHM 1/10W
RD45, RD68	165210406	RESISTOR,CHIP,100KOHM 1/10W
RD53, RD57	161356109	RESISTOR,CARBON,560OHM 1/6W
RD63, RD64	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
RD66	165247306	RESISTOR,CHIP,47KOHM 1/10W
RD69	165282206	RESISTOR,CHIP,8.2KOHM 1/10W

23. PC BOARD ASS'Y (REAR SUB) PARTS LOCATION FOR Hi-Fi MODEL

The CD54 indicated here has the correct polarity, but note that there are a few REAR SUB PCBs whose polarity is miss-printed

*Caution for CD54

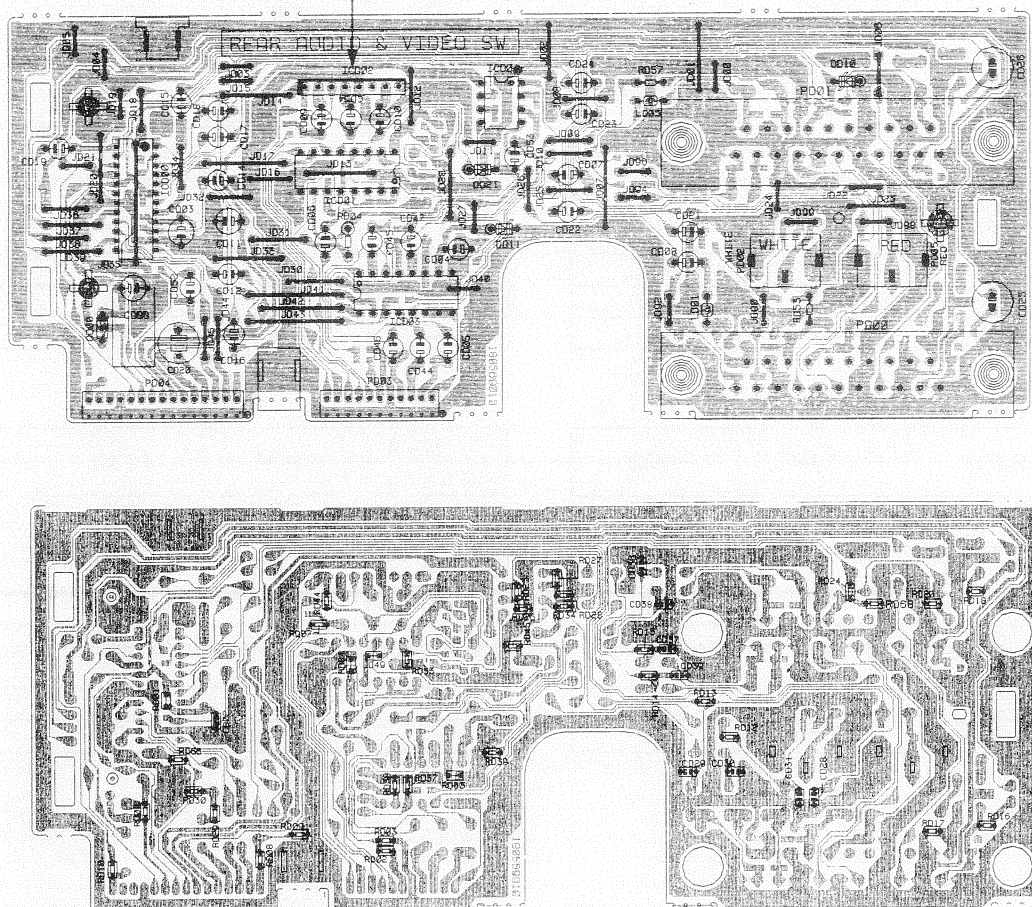


TABLE OF IC PIN VOLTAGE

CONDITION

MODE

STOP : RECIVING CH2 ANTENNA DISCONNECTED,BLUE BACK ON THE TV SCREEN
 PLAY : TEST TEPE TPS-3
 REC : AUX AUDIO IN-1KHz 300mV(LEADER LAG-120G
 : AUX VIDEO IN-PHILLIPS PM5518-TX-VPS,COLOR BAR

INSTRUMENT

DEGITAL MALTIMETER : HEWLETT 34401A
 INPUT RESISTANCE : 10MΩ

TABLE 1 IC200 TA1258N

MODE PIN No.	STOP	PLAY	REC
1	3.0	2.8	2.8
2	1.9	2.1	2.1
3	0.0	1.7	1.6
4	2.4	2.4	2.6
5	2.4	2.4	2.6
6	2.7	2.7	2.7
7	1.8	4.2	1.8
8	0.0	0.0	0.0
9	3.2	3.1	3.2
10	4.9	4.9	4.9
11	5.1	5.1	5.1
12	5.1	5.1	5.1
13	0.0	0.0	0.0
14	2.3	1.8	2.3
15	2.5	2.6	2.6
16	2.3	2.0	2.3
17	2.5	2.6	2.6
18	2.8	2.4	2.8
19	3.8	3.8	3.8
20	2.9	2.8	2.8
21	2.3	2.6	2.6

MODE PIN No.	STOP	PLAY	REC
22	2.7	3.0	2.7
23	4.9	4.9	4.9
24	0.8	2.2	1.7
25	2.4	2.7	1.9
26	1.5	1.7	1.5
27	1.8	1.8	1.8
28	3.0	3.0	2.9
29	3.0	3.3	2.7
30	0.8	0.9	0.9
31	0.4	0.4	0.4
32	1.0	0.5	0.5
33	2.6	2.5	2.5
34	3.4	3.5	3.5
35	2.2	2.4	2.4
36	3.4	3.4	3.4
37	1.4	1.5	1.5
38	3.5	3.4	3.4
39	2.8	2.8	2.8
40	3.0	2.4	2.3
41	2.8	2.8	2.8
42	4.9	4.9	4.9

TABLE 2 IC201 TL8850AP

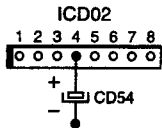
MODE PIN No.	STOP	PLAY	REC
1	0.0	0.0	0.0
2	5.1	5.0	5.0
3	0.0	0.0	0.0
4	5.0	5.0	5.0
5	0.0	0.0	0.0
6	2.5	2.4	2.5
7	2.5	2.5	2.5
8	2.0	2.0	2.0

MODE PIN No.	STOP	PLAY	REC
9	3.2	3.3	3.3
10	1.8	1.8	1.8
11	2.2	2.3	2.3
12	10.6	10.6	10.6
13	0.0	0.0	0.0
14	2.4	2.4	2.4
15	1.7	1.7	1.7
16	3.3	3.3	3.3

PC BOARD ASSY(REAR SUB)

Ref. No.	Part No.	Description
RD12, RD13	165210206	RESISTOR,CHIP,1KOHM 1/10W
RD14, RD15	165210206	RESISTOR,CHIP,1KOHM 1/10W
RD16, RD17	165275006	RESISTOR,CHIP,75OHM 1/10W
RD18, RD20	165275006	RESISTOR,CHIP,75OHM 1/10W
RD25, RD27	165227206	RESISTOR,CHIP,2.7KOHM 1/10W
RD26, RD28	165210306	RESISTOR,CHIP,10KOHM 1/10W
RD29, RD30	165275006	RESISTOR,CHIP,75OHM 1/10W
RD33, RD34	165210406	RESISTOR,CHIP,100KOHM 1/10W
RD37, RD38	165210406	RESISTOR,CHIP,100KOHM 1/10W
RD39, RD44	165210406	RESISTOR,CHIP,100KOHM 1/10W
RD45, RD68	165210406	RESISTOR,CHIP,100KOHM 1/10W
RD53, RD57	161356109	RESISTOR,CARBON,560OHM 1/6W
RD63, RD64	165268206	RESISTOR,CHIP,6.8KOHM 1/10W
RD66	165247306	RESISTOR,CHIP,47KOHM 1/10W
RD69	165282206	RESISTOR,CHIP,8.2KOHM 1/10W

23. PC BOARD ASS'Y (REAR SUB) PARTS LOCATION FOR Hi-Fi MODEL



The CD54 indicated here has the correct polarity, but note that there are a few REAR SUB PCBs whose polarity is miss-printed

*Caution for CD54

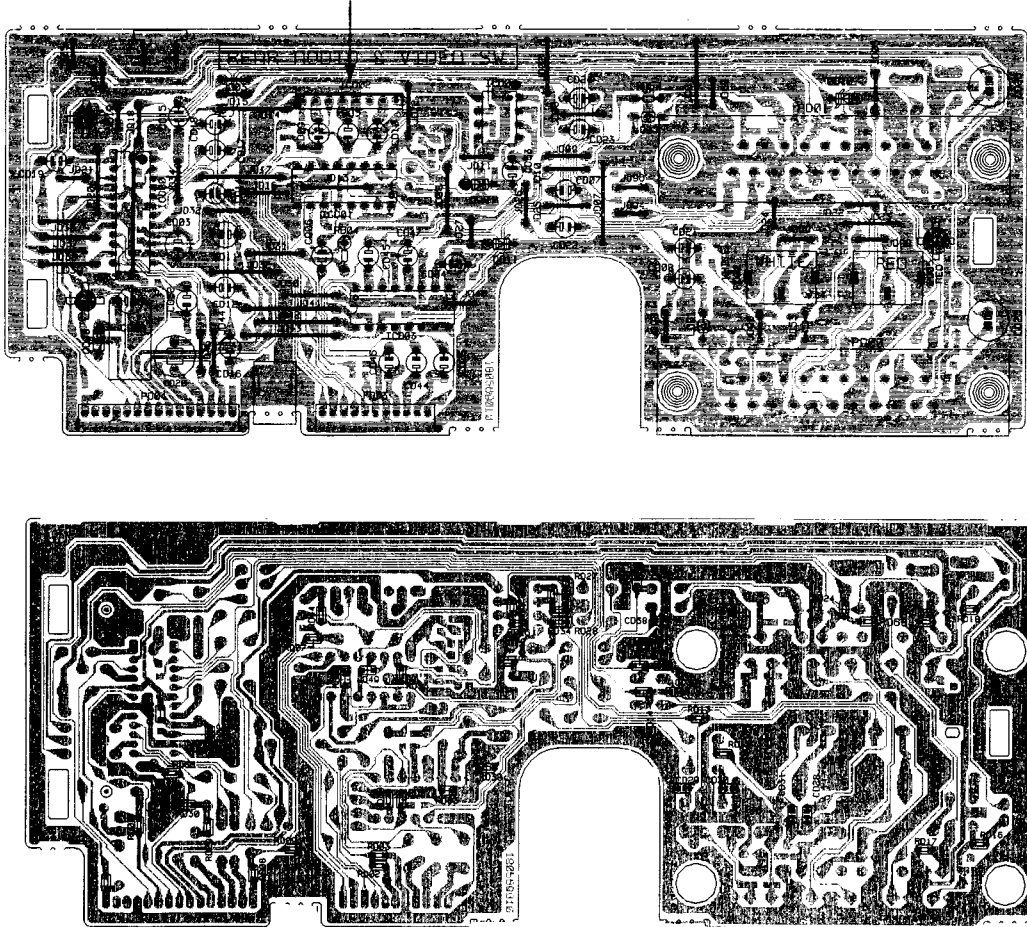


TABLE 3 IC400 LA7286

MODE PIN No.	STOP	PLAY	REC
1	12.7	12.7	4.4
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	4.0	4.0	3.9
5	4.1	4.1	3.9
6	4.1	4.1	4.0
7	0.0	0.0	0.0
8	4.1	4.1	3.9
9	4.1	4.1	3.9
10	4.1	4.1	4.0
11	0.0	0.0	0.0
12	0.0	0.0	0.0

MODE PIN No.	STOP	PLAY	REC
13	4.2	4.1	4.0
14	4.1	4.1	3.9
15	4.1	4.1	3.9
16	0.2	0.2	0.7
17	4.1	4.1	3.9
18	0.0	0.0	0.8
19	12.8	12.8	12.7
20	12.7	12.7	12.6
21	0.0	0.0	0.0
22	5.1	0.0	0.0
23	5.1	0.0	5.1
24	0.0	0.0	4.7

TABLE 4 IC401 TA1246F (Hi-Fi MODEL ONLY)

MODE PIN No.	STOP	PLAY	REC
1	4.5	4.5	4.5
2	4.5	4.5	4.5
3	4.5	4.5	4.5
4	4.5	4.5	4.5
5	4.5	4.5	4.5
6	4.5	4.5	4.5
7	4.5	4.5	4.5
8	1.6	0.0	0.6
9	4.5	4.5	4.5
10	5.1	0.0	0.0
11	4.5	4.5	4.5
12	0.0	0.0	0.0
13	4.5	4.5	4.5
14	0.0	0.0	0.0
15	0.0	1.6	1.6
16	0.0	1.6	1.6
17	5.1	5.1	5.1
18	5.1	5.1	5.1
19	4.5	4.5	4.5
20	0.0	0.0	0.0
21	0.6	0.6	0.6
22	0.0	0.0	2.4
23	5.1	5.1	5.1
24	0.0	0.0	1.0

MODE PIN No.	STOP	PLAY	REC
25	1.5	1.5	2.2
26	0.0	0.4	0.0
27	0.0	4.5	0.0
28	4.5	4.5	4.5
29	0.0	0.0	0.0
30	2.3	0.8	2.3
31	4.5	4.5	4.5
32	1.6	0.0	0.6
33	4.5	4.5	4.5
34	4.5	4.5	4.5
35	4.5	4.5	4.5
36	4.5	4.5	4.5
37	9.1	9.1	9.1
38	4.5	4.5	4.5
39	4.5	4.5	4.5
40	0.0	0.0	0.0
41	4.5	4.5	4.5
42	0.0	0.0	0.0
43	4.5	4.5	4.5
44	0.0	0.0	0.0
45	4.5	4.5	4.5
46	0.0	0.0	0.0
47	4.5	4.5	4.5
48	4.5	4.5	4.5

TABLE 5 IC600 TA7291S

MODE PIN No.	STOP	PLAY	REC
1	0.0	0.0	0.0
2	9.1	9.1	9.1
3	0.1	0.1	0.1
4	0.0	0.0	0.0
5	0.0	0.0	0.0

MODE PIN No.	STOP	PLAY	REC
6	14.0	14.0	13.9
7	0.0	0.0	0.0
8	14.0	14.0	13.9
9	0.0	0.0	0.0

TABLE 6 IC601 TB6515AP

MODE PIN No.	STOP	PLAY	REC
1	0.1	0.6	0.6
2	1.4	1.4	1.4
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	14.0	14.0	13.9
6	0.0	0.0	0.0
7	13.9	10.5	10.4
8	13.9	10.5	10.4

MODE PIN No.	STOP	PLAY	REC
9	13.9	10.5	10.4
10	0.0	0.05	0.05
11	0.0	2.7	2.7
12	0.0	0.0	0.0
13	5.0	5.2	5.2
14	—	—	—
15	0.6	0.6	0.6
16	0.8	0.8	0.8

TABLE 7 IC702 AT24C04

MODE PIN No.	STOP	PLAY	REC
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0

MODE PIN No.	STOP	PLAY	REC
5	5.1	5.1	5.1
6	5.1	5.1	5.1
7	0.0	0.0	0.0
8	5.1	5.1	5.1

TABLE 8 ICD00 LA7156

MODE PIN No.	STOP	PLAY	REC
1	6.3	6.3	6.3
2	0.0	0.0	0.0
3	6.3	6.3	6.3
4	11.0	11.0	10.9
5	6.3	6.3	6.3
6	11.0	11.0	11.0
7	0.0	0.0	0.0
8	2.7	2.7	2.7
9	11.0	11.0	11.0
10	3.5	3.3	3.1
11	0.0	0.0	0.0
12	2.3	2.3	2.3

MODE PIN No.	STOP	PLAY	REC
13	2.7	2.7	2.7
14	2.6	2.6	2.6
15	2.8	2.6	2.1
16	2.7	2.6	2.0
17	2.6	2.6	2.6
18	0.0	0.0	0.0
19	2.5	2.5	2.5
20	11.1	11.0	11.0
21	5.7	5.7	5.7
22	5.7	5.7	5.6
23	5.7	5.7	5.7
24	6.3	6.3	6.3

TABLE 9 ICD01 CD4053BE (HI-FI MODEL ONLY)

MODE PIN No.	STOP	PLAY	REC
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	-5.3	-5.3	-5.3
8	0.0	0.0	0.0

MODE PIN No.	STOP	PLAY	REC
9	5.1	5.1	5.1
10	0.0	0.0	0.0
11	0.0	0.0	0.0
12	0.0	0.0	0.0
13	0.0	0.0	0.0
14	0.0	0.0	0.0
15	0.0	0.0	0.0
16	5.0	5.0	5.0

TABLE 10 ICD02 LA7016

MODE PIN No.	STOP	PLAY	REC
1	11.1	11.0	11.0
2	7.1	7.1	7.0
3	5.0	5.0	5.0
4	6.5	6.4	6.4

MODE PIN No.	STOP	PLAY	REC
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	7.2	7.1	7.1
8	0.0	0.0	0.0

TABLE 11 ICD03 CD4053BE (HI-FI MODEL ONLY)

MODE PIN No.	STOP	PLAY	REC
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	-5.3	-5.3	-5.3
8	0.0	0.0	0.0

MODE PIN No.	STOP	PLAY	REC
9	0.0	0.0	0.0
10	0.0	0.0	0.0
11	0.0	0.0	0.0
12	0.0	0.0	0.0
13	0.0	0.0	0.0
14	0.0	0.0	0.0
15	0.0	0.0	0.0
16	5.0	5.0	5.0

TABLE 12 ICD04 BA4558

MODE PIN No.	STOP	PLAY	REC
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	-5.3	-5.3	-5.3

MODE PIN No.	STOP	PLAY	REC
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	0.0	0.0	0.0
8	5.0	5.0	5.0

TABLE 13 ICE01 SDA5649

MODE PIN No.	STOP	PLAY	REC
1	0.0	0.0	0.0
2	5.1	5.1	5.1
3	5.1	5.1	5.1
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	5.1	5.1	5.1
7	—	—	—

MODE PIN No.	STOP	PLAY	REC
8	0.0	0.0	0.0
9	—	—	—
10	—	—	—
11	—	—	—
12	1.5	1.5	1.5
13	1.4	1.4	1.4
14	5.1	5.1	5.1

TABLE 14 ICH01 CD4053BE (1 SCART MODEL ONLY)

MODE PIN No.	STOP	PLAY	REC
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	-4.8	-4.8	-4.8
8	0.0	0.0	0.0

MODE PIN No.	STOP	PLAY	REC
9	0.0	0.0	5.0
10	0.0	0.0	5.0
11	0.0	0.0	0.0
12	0.0	0.0	0.0
13	0.0	0.0	0.0
14	0.0	0.0	0.0
15	0.0	0.0	0.0
16	4.6	4.6	4.7

* The voltages listed above include a +-10% tolerance.

SERVICE NOTE

Procedure for Initializing the EEPROM

1. Replace the EEPROM (IC702).
2. Install the board/DECK on the chassis.
3. Turn ON the AC power supply to the set, and then turn OFF the POWER to the set.
4. Short circuit the PG DELAY terminal (J208) of the test jumper on the MAIN board with the GND terminal (J226) so that the FIP lights up (approximately 2 seconds). (Figure 1)
5. When the FIP lights up, initialization of the EEPROM starts. (Figure 2)
6. After initialization ends, the FIP returns to the normal POWER OFF mode. (Figure 3)
7. Clear the TEST POINT short.
8. Initialization is now finished.

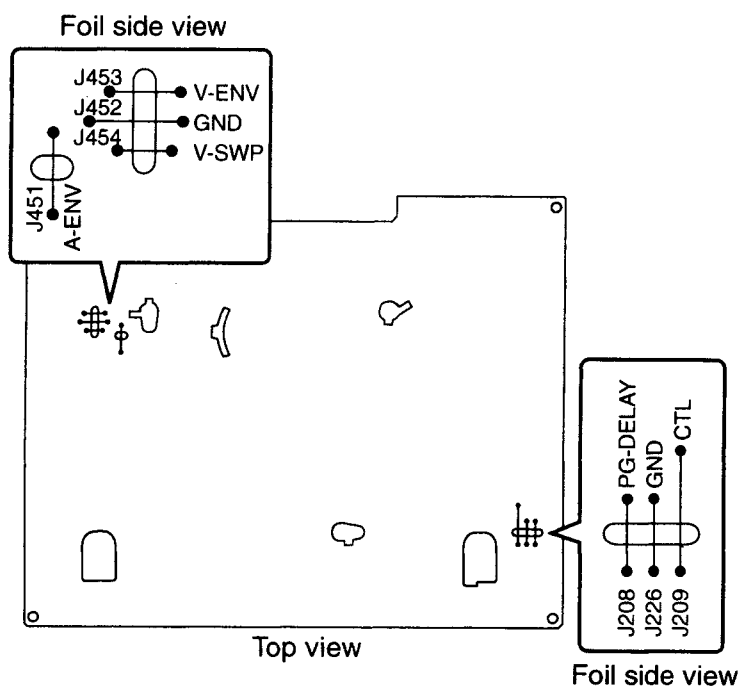


Figure 1

Start of initialization



Figure 2

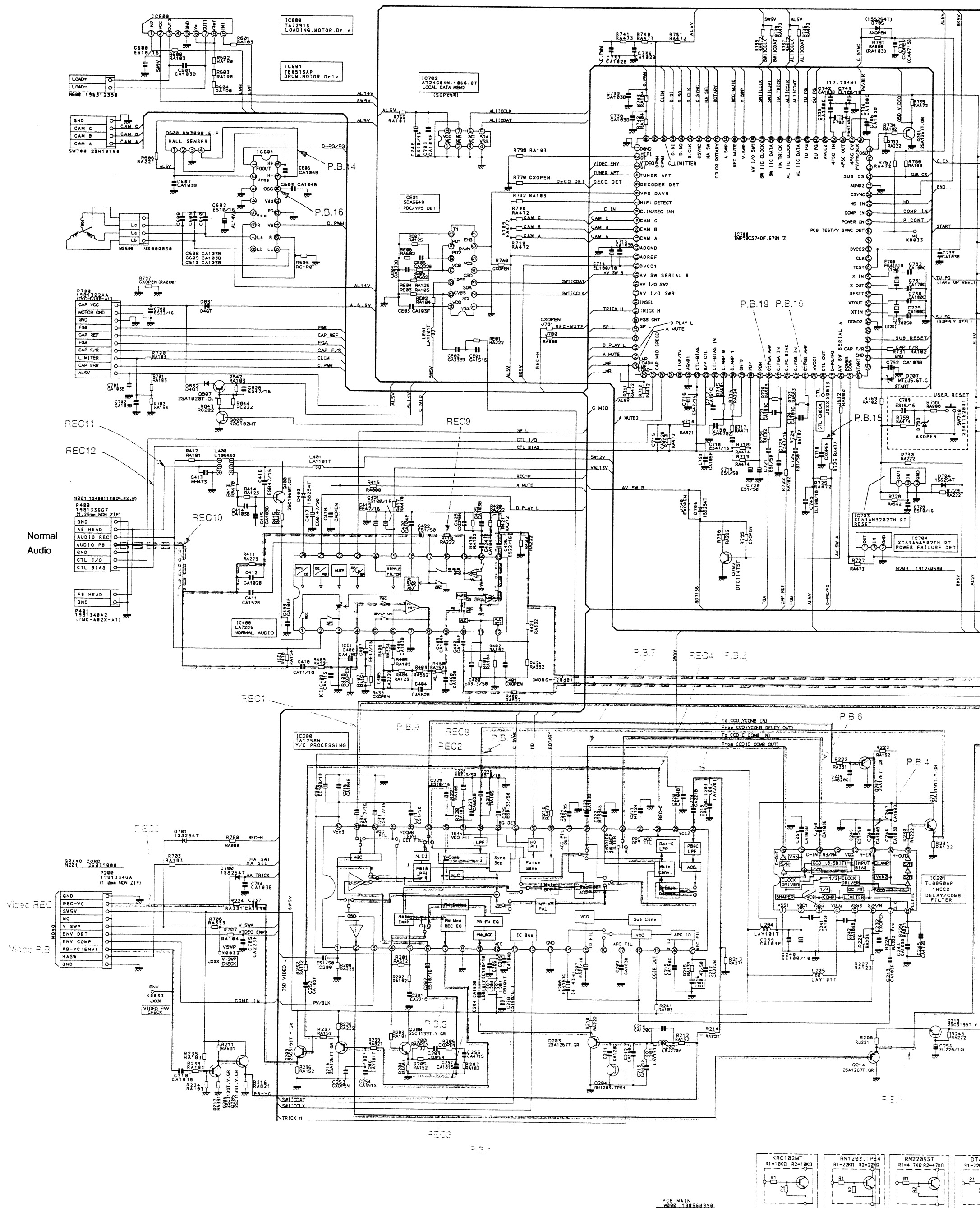
End of initialization

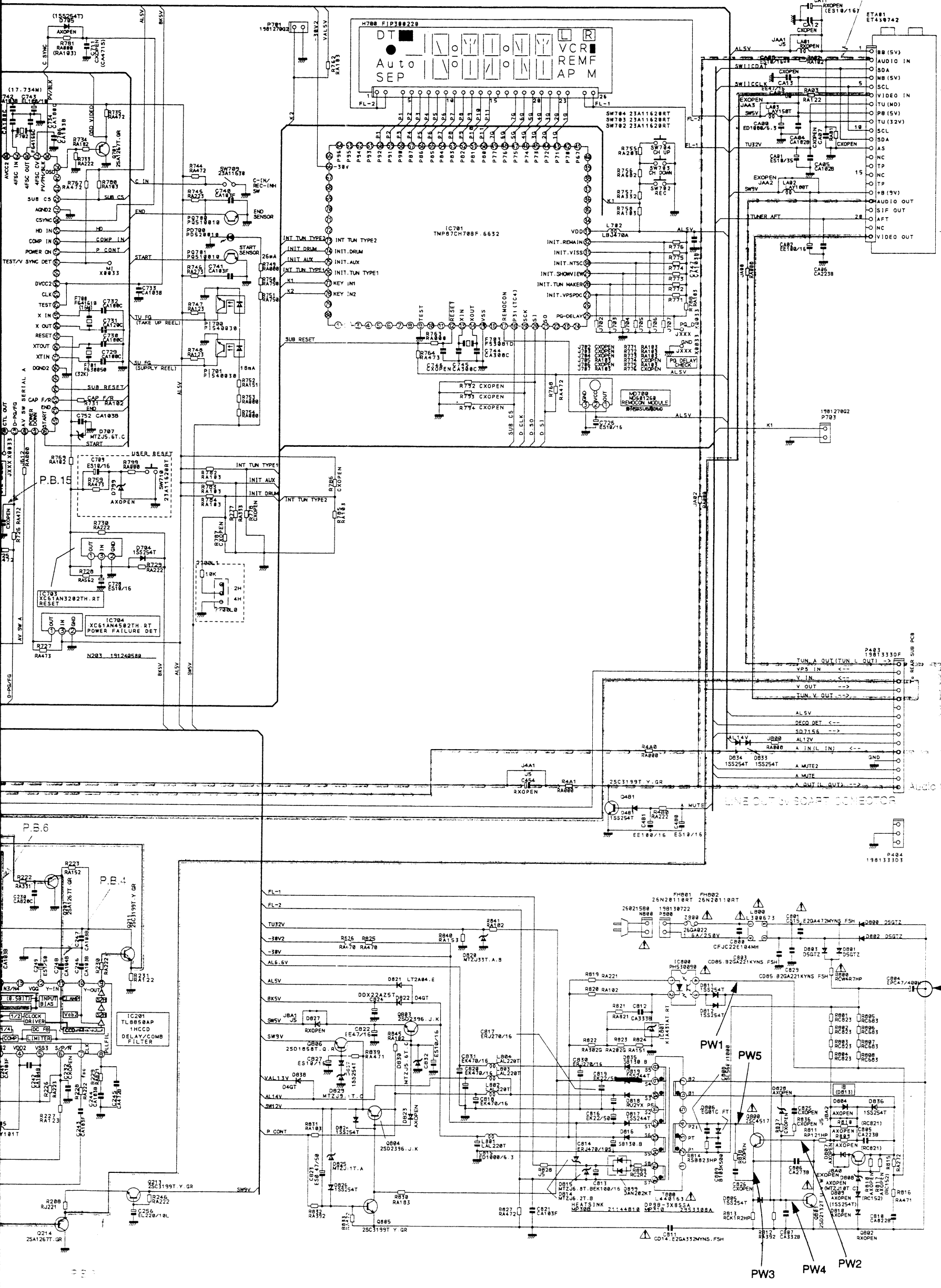
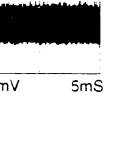
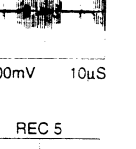
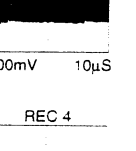
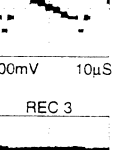
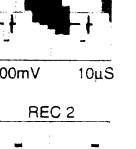
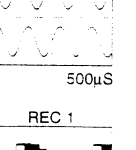
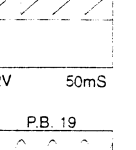
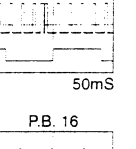
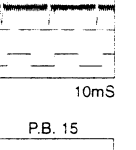
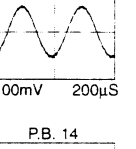
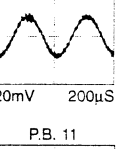
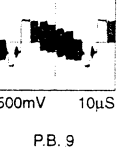
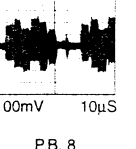
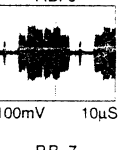
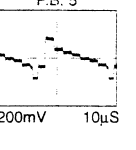
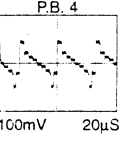
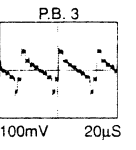
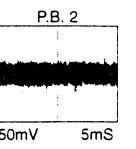
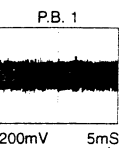
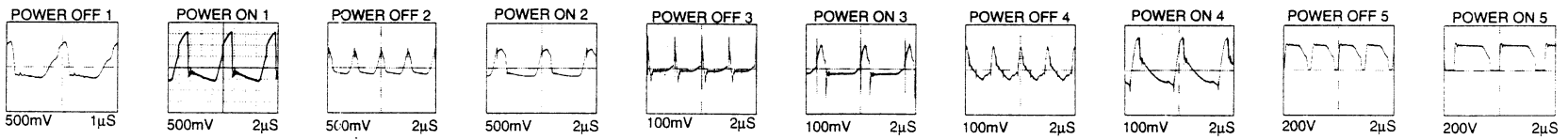


Figure 3

POWER

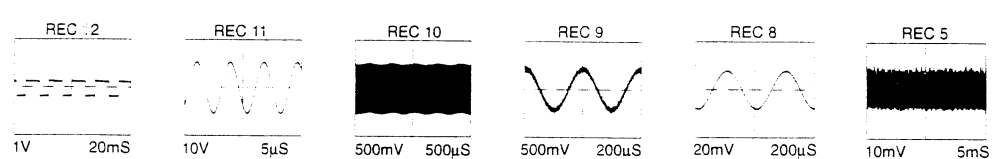
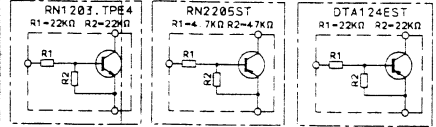
500mV

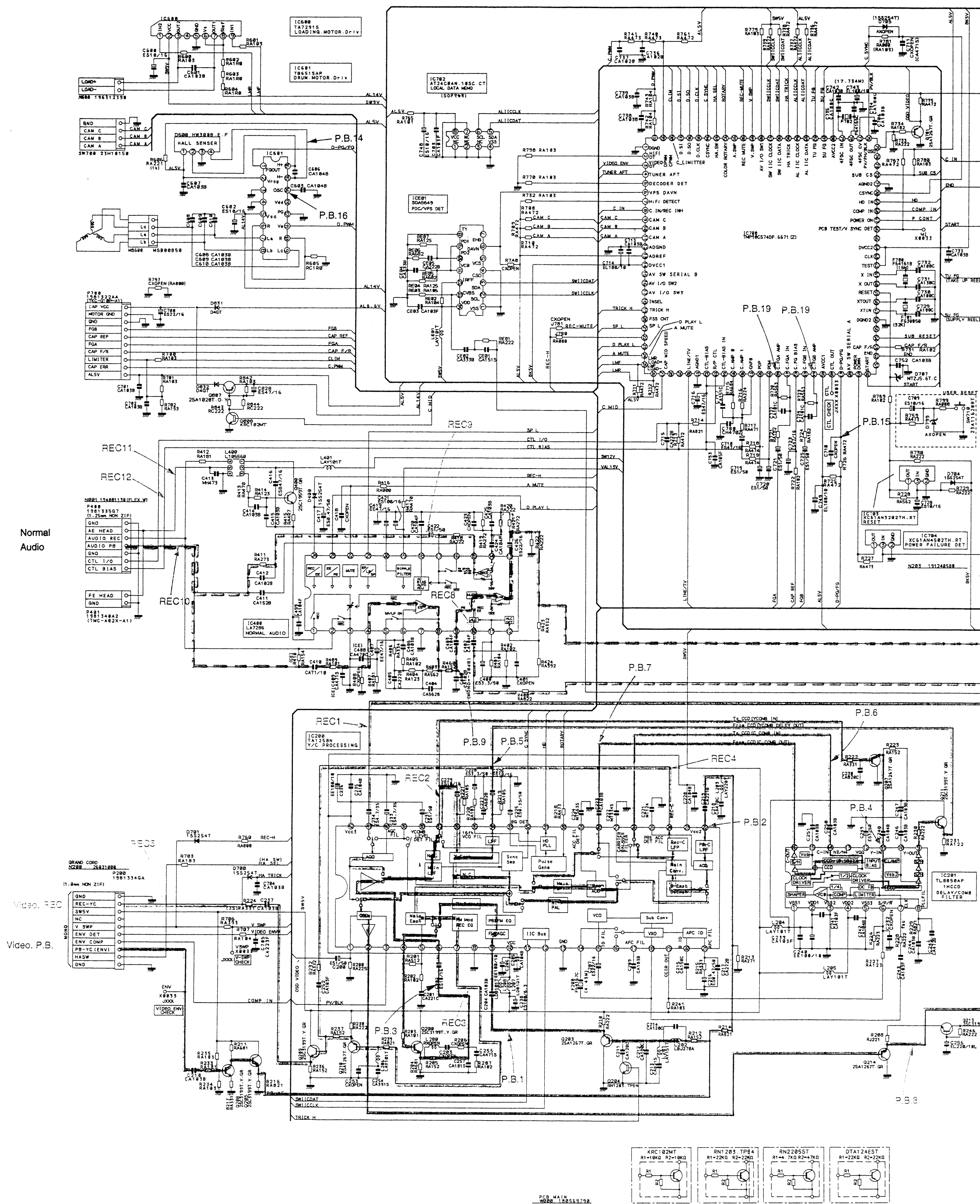


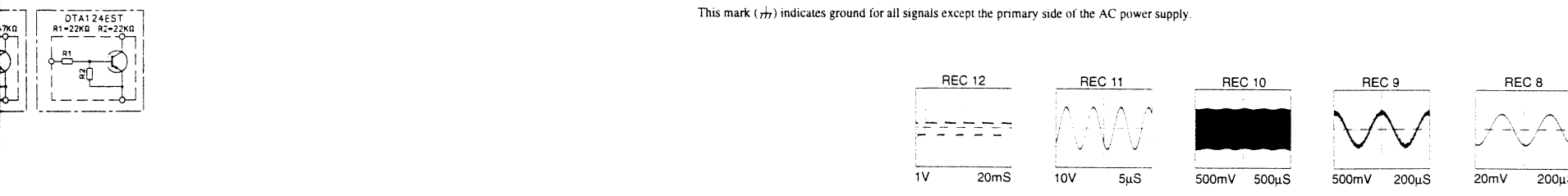
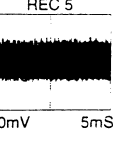
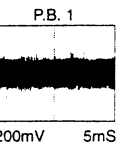


When measuring points PW1 to PW5 shown in the circuit diagram, connect the ground on the measurement device to the special insulated ground point on the primary side of the AC power supply, from the other ground. Be careful that these two kinds of insulated grounds are not shorted by way of the ground on the measurement device.

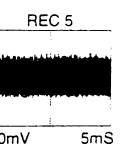
This mark (⏏) indicates ground for all signals except the primary side of the AC power supply.



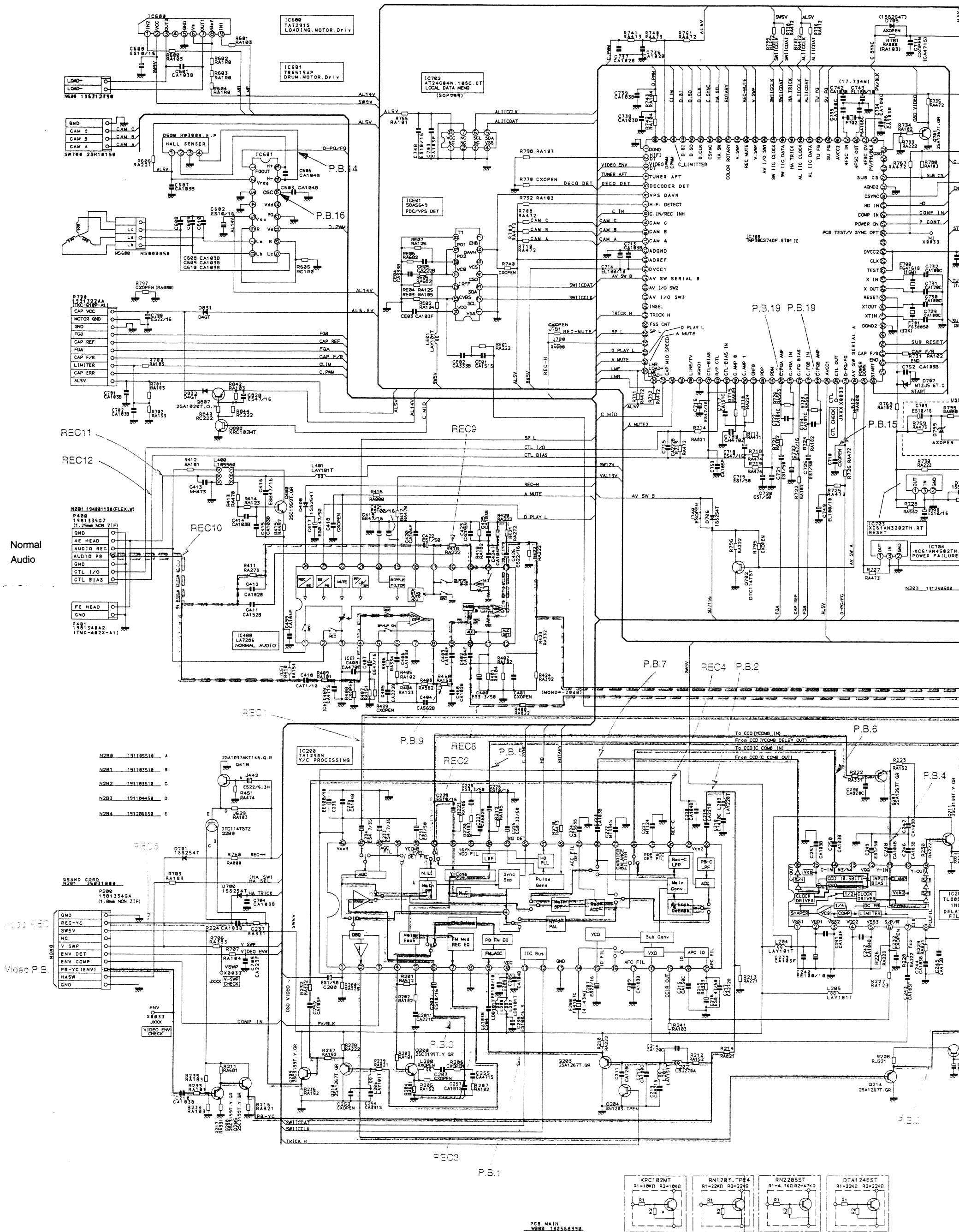


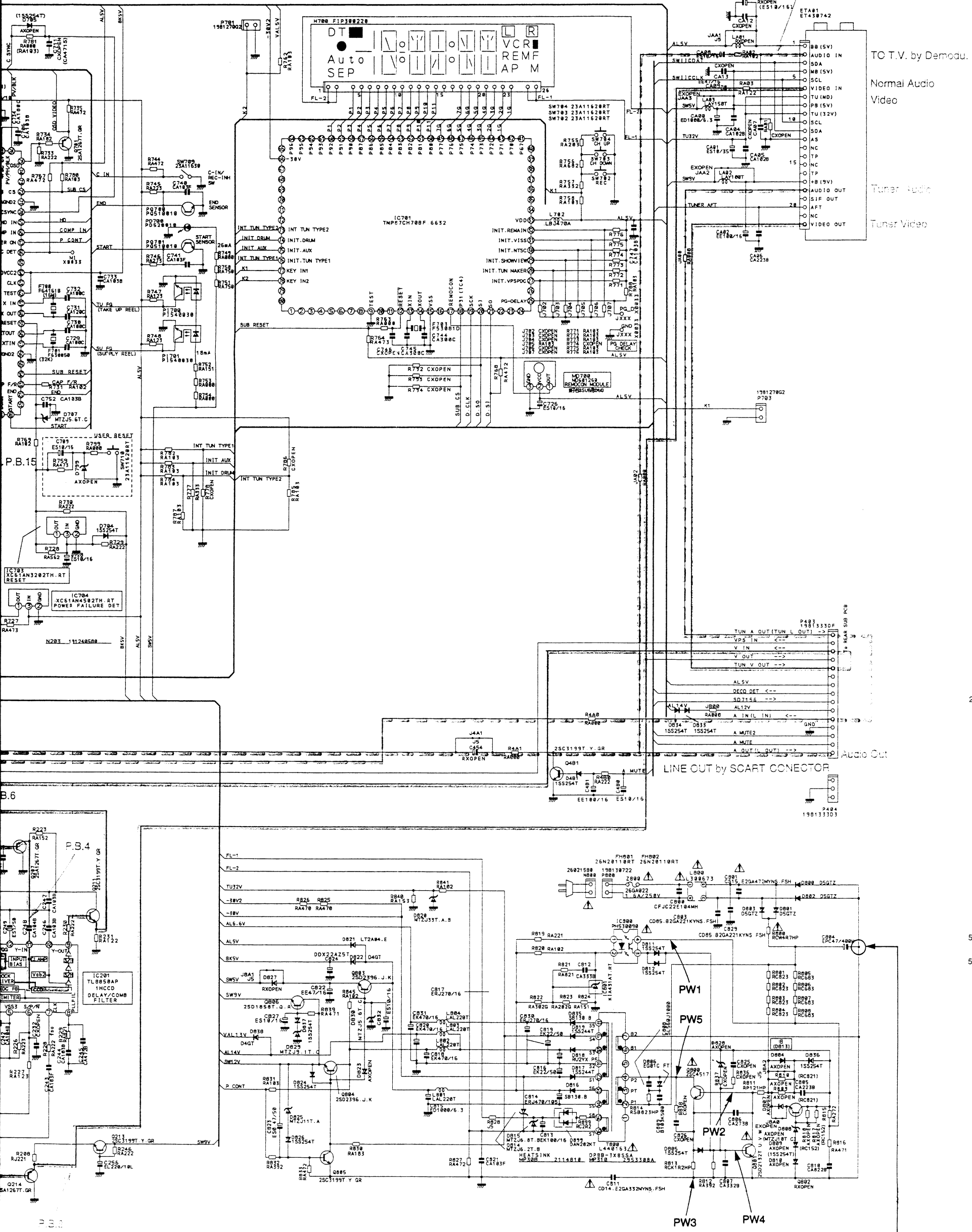
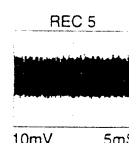
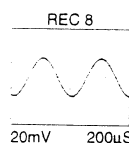
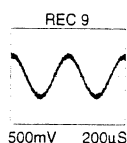
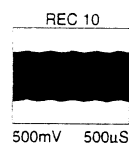
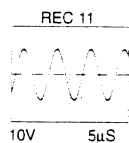
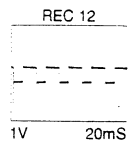
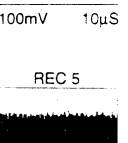
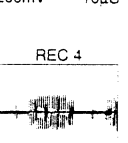
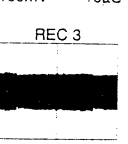
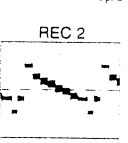
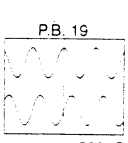
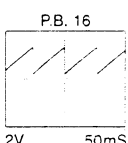
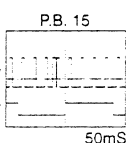
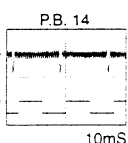
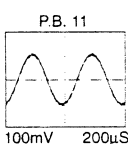
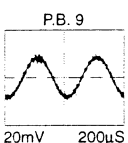
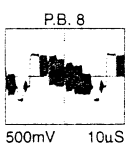
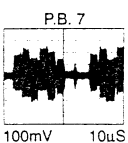
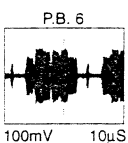
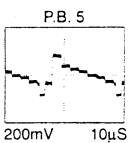
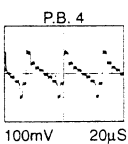
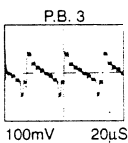
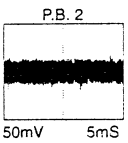
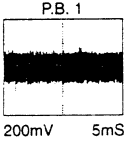
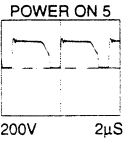
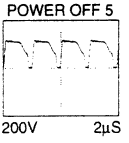
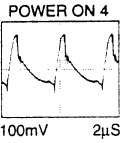
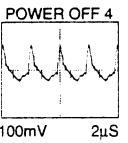
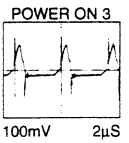
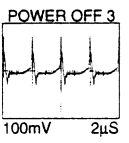
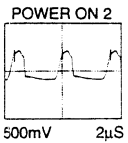
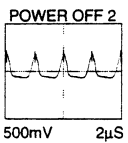
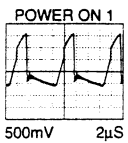
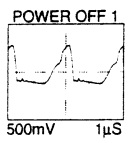


This mark (\perp) indicates ground for all signals except the primary side of the AC power supply.



4-3.SCHEMATIC DIAGRAM FOR 4 VIDEO HEAD MONAURAL 2 SCART MODEL





When measuring points PW1 to PW5 shown in the circuit diagram, connect the ground on the measurement device to the special insulated ground point on the primary side of the AC power supply, from the other ground. Be careful that these two kinds of insulated grounds are not shorted by way of the ground on the measurement device.

This mark (⌚) indicates ground for all signals except the primary side of the AC power supply.

4-4. SCHEMATIC DIAGRAM FOR Hi-Fi MODEL



